A NEW

METHOD

OF TREATING

CONSUMPTIONS.

Wherein All the

DECAYS

Incident To

HUMAN BODIES,

Are Mechanically Accounted for.

WITH

Some CONSIDERATIONS, touching the Difference between *Conſumptions* and thoſe *Decays* that Naturally attend OLD AGE.

To which are Added,

ARGUMENTS in Defence of the Poſſibility of Curing *Ulcers* of the *Lungs*: As alſo REASONS demonſtrating that the irregular Diſcharges of all the Evacuations in CONSUMPTIONS, ariſe from the Reſiſtance of the Heart not Decaying in a ſimple Proportion to the Reſiſtance of the other Parts.

By N. ROBINSON, M.D.

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MVSEVM
BRITAN
NICVM

To the HONOURABLE

Sir Hans Sloane, *Bar.*

PRESIDENT of the

COLLEGE of PHYSICIANS,

VICE-PRESIDENT of the

ROYAL SOCIETY, &c.

SIR,

AFTER I had finish'd the following Discourse on CONSUMPTIONS; I was at a Loss for a Person of Honour and Distinction to whom I might address it.

I was very unwilling to hazard the little Reputation I had gain'd in the World, by a former Performance, upon the Iſſue of a ſecond Attempt; and, therefore, made Choice of your ſelf, as the Perſon, of all others, under whoſe Umbrage I might ſafely launch into the World.

I could not but think, that the great Character you ſo deſervedly bear, in the learned World, would be the readieſt Means to procure it a favourable Reception, and prevent thoſe perſonal Cavils and Reflections, that the beſt and moſt accurate Diſcourſes cannot always get clear of.

I am ſenſible, that, to a Gentleman of your refin'd Way of Thinking,

ing, endow'd with all the Ornaments of an obliging Converſation; nothing can come unacceptable, that but attempts the Improvement of an Art, in which you ſo eminently Excel.

While other Gentlemen encounter Oppoſition in their Way to Honour; You, Sir, have been invited to preſide in the Faculty of Phyſick, and govern in the Arts and Sciences; and how well you have diſcharg'd thoſe important Truſts, may be collected from the Length of Time, they have thought proper to continue you their Preſident.

You will perceive, Sir, in the enſuing Diſcourſe, that I have endeavour'd to account for all the moſt perplexing Phænomena's of

Decays, Waſtes and Conſumptions, from Principles entirely Mechanical; and have clearly diſcover'd, that the ſeveral Changes incident to affect human Bodies, under this Diſeaſe, ariſe from the Mechanical Affections of Matter and Motion, whenever the Conſtitution warps from its Standard.

You will forgive me, the Freedom I take in mentioning your *Natural Hiſtory*, ſince we had been depriv'd of a very valuable Branch of Knowledge, in Relation to thoſe Parts of the Weſtern World, had not your ſeaſonable Care interpos'd for its Reſcue, and, at a vaſt Expence, compil'd a Work that will Enrol your Name in the Records of Fame, as long as Learning ſhall laſt.

How

How juſtly, therefore, may I apply to your ſelf, that noble Encomium whith which *Horace* ſo agreeably Complements himſelf, on finiſhing the firſt Three Books of his Odes,

Exegi Monumentum ære perennius,
Regalique Situ Pyramidum altius:
Quod non Imber edax, non Aquilo impotens
Poſſit diruere ———

HOR. lib. 3. od. 30.

I am far from thinking, that the following Diſcourſe is deſtitute of Errors, neither will I treſpaſs ſo far on your Goodneſs, as to invoke your Patronage of them: I only hope, that other Gentlemen, after your Example, will be ſo Candid as to paſs them over.

Fearing I may Treſpaſs too much on your Patience, give me leave to aſſure you, that I tender the following Treatiſe to your Conſideration, with all the Deference due to your great Character; who am, in the moſt reſpectful Manner,

Honoured SIR,

Your moſt Obliged,

And moſt Obedient

Humble Servant,

N. ROBINSON.



THE PREFACE.

AS *Health is the moſt valuable Bleſſing that Mankind can enjoy upon* Earth; *and as it is that peculiar Habitude, that gives a Reliſh to all his other Pleaſures; and without which, all the Riches in the World cannot create him the leaſt Satisfaction; ſo will it appear of what high Importance it is, and how nearly it concerns him, that the Practice of Phyſick ſhould be grounded on juſt Principles.*

I ſhall, therefore, in this Preface, *acquaint the* Reader *with the Method, Order and Contrivance, in which I have diſpos'd the following Treatiſe, as the propereſt Means*

Means to give him a right Underſtanding of its ſeveral Parts.

It is true, the Generality of Mankind, for a conſiderable Time, have entertain'd but very narrow Conceptions of Phyſick, as if the nobleſt of all Arts were grounded on a Set of precarious Principles, variable at Pleaſure, and not ſupported with that Evidence attending moſt other Profeſſions.

I wiſh, indeed, for the Honour of Phyſick, that the many Changes and different Hypotheſes handed to Mankind, in the ſeveral Ages of the World, had not given too much Reaſon for this Conjecture: But what then! Shall the Notions of a few fanciful Men have the Authority to deſtroy the Certainty of Truth, or perſuade the World to believe, that the Natures of Things are not eſtabliſh'd on certain Principles, which acting in the ſame Circumſtances, do not always produce the ſame Effects?

Had thoſe Gentlemen, that took upon them the Minting of new Hypotheſes, but attended to the Obſervations of Nature, and

and the natural Effects of Cauſes, they eaſily might have diſcover'd, that the human Machine is a Part of the Univerſe, and, conſequently, that all its Changes are to be accounted for, from the ſame Laws, that ſupport the Motions of this grand Fabrick.

Now, as I have endeavour'd to treat this Subject in the mechanical Way, ſo I think it will be incumbent on me, that I, in the firſt Place, explain the Nature of Mechaniſm, and inform the Reader what I mean by that Term.

Whoſoever, therefore, ſhall peruſe the following Treatiſe, will clearly perceive, that I have endeavour'd to account for all the Phænomena's attending Conſumptions, from the Laws of Attraction, Motion and Diviſion: Theſe are the Three grand Principles, on which the ſeveral Springs of the Conſtitution turn, and to which all the Symptoms of Health and Diſeaſes are referable.

The Solids and Fluids are that Syſtem of Matter, on which theſe Principles operate, in order to produce theſe Phænomena's of Health

Health and Diſeaſes; nor is it poſſible for the Wit of Man to conceive, how either a Diſeaſe can invade the Body, or Health return, without intending or remitting, that is, leſſening or increaſing the Motions of the Solids and Fluids.

By the Word Mechaniſm then, as apply'd to Animal Bodies, I underſtand a Syſtem of Matter ſo conſtituted, as to be capable of producing certain Motions tending to a determinate End, by means of thoſe Springs and Pullies that reſult from its Structure.

The Cauſe of the Continuance of thoſe Motions, I call its Mechanical Powers, the Principle of which, is the Heart; whoſe Office is to govern and direct all the greater Springs and under Motions of the whole Fabrick.

Theſe Propoſitions I have advanc'd, in the Beginning of both the firſt and ſecond Part of this Treatiſe, as the Baſis of the following Theory and Practice, are a kind of Mathematical Reaſoning, without Numbers, wherein the firſt Propoſition is a Data, con-

conſiſting of ſelf-evident Principles, on which all the Reſt depend: The Second has a very near Relation with the Firſt, the Third with the Second, the Fourth with the Third, and ſo on, through the whole Chain; each Propoſition expreſſing a Relation to the former, and at the ſame Time is connected with the latter, through every the leaſt Remove.

How this Manner of Reaſoning will be reliſh'd in this learned and refin'd Age, I know not; but ſo much I will venture to ſay, That it is the only Way we can take to arrive at Certainty in Phyſick: For all the Knowledge we have, in any of the Arts or Sciences, is only the Diſcovery of Truths that concern thoſe Arts or Sciences, and our Knowledge is always in Proportion to the Truths we diſcover, and no farther; and he is the moſt acute Philoſopher, that diſcovers moſt true Propoſitions, expreſſing the Habitudes of natural Things, and their Relations and Connexions with each other.

To conceive Things, therefore, as they are carried on in the Body, and to underſtand the firſt Principles on which they depend,

pend, that is, Knowledge. Now, the firſt Principle of all Action in human Bodies is Motion. It begins with Life, is co-exiſtent with the firſt Beating of the Pulſe, and never ceaſes till a Period is put to all the vital Springs of Nature.

And, as it is neceſſary, that all Actions reſpecting the Animal Oeconomy, ſhould have their peculiar Agents on which to depend; ſo it is impoſſible to produce a Diſeaſe without a Cauſe, or a Cauſe without intending or remitting the Motions of the Solids and Fluids, which Intendment or Remitment will always excite the ſame Effects, in the ſame given Circumſtances; that is, the ſame Symptoms will always appear from the ſame Cauſes, acting in the ſame given Circumſtances, which will always require the ſame Forces or Powers, in order to their Removal, that is, in order to compleat a ſucceſsful Cure.

Now, in all Diſeaſes, whether Acute, Chronick or Nervous, we certainly diſcover the Symptoms heighten'd or depreſs'd, in Proportion as the Cauſes increaſe or leſſen, ſo that once we diſcover the Cauſes acting and

and their Effects, we ſhall eaſily be enabled to judge of the Symptoms that are yet to appear, and, conſequently, Prognoſticate, with the greateſt Certainty, the Danger to be apprehended from the Violence of the Diſeaſe; for as we diſtinguiſh the different Sorts of Matter by its Accidents; ſo we clearly diſcover the different Natures of Diſeaſes, by their different Symptoms; for the Symptoms are to Diſeaſes, what Accidents are to Matter, that is, they contain its nominal Eſſence, or thoſe inſeparable Pathognomonick Characters, by which we diſtinguiſh every Diſeaſe to be what it is.

I, indeed, took Notice, in my New Theory of Phyſick, *of a Treatiſe on the Vapours and Hypochondria; Diſeaſes, that I muſt confeſs need a better Explanation: But the inſuperable Difficulties I met with, in the Proſecution of thoſe Subjects, and the Uncertainty of bringing, to bear, ſeveral Experiments neceſſary to ſupport the Exiſtence of the Animal Fluids, oblig'd me to lay that Enterprize aſide, and attempt ſomething more Level, or at leaſt what I thought more Level, to my Capacity; for,*

regularly

regularly and mechanically to account for all those violent Contortions of Body, those oppoſite, ſtrange, and unuſual Characters of Weeping and Laughing, that alternately affect ſome Hyſteric Women, demands a deeper Stretch in Philoſophical Enquiries, than I dare preſume, at preſent, to be Maſter of.

For theſe Reaſons, therefore, (and that which the great Sydenham *return'd a Gentleman that ask'd him why he did not favour the World with a Treatiſe on* Nervous Diſeaſes) *I have thought proper to lay that Subject aſide, and try whether it is not poſſible to account for all the moſt perplexing Symptoms, that affect the Conſtitution in Conſumptions, from the mere mechanical Affections of Matter and Motion, ſince it appears, that no other Principles are neceſſary, in ſupporting the Syſtem of human Nature, beſides thoſe concern'd in carrying on the Harmony of the Univerſe.*

Warwick-Court *in*
Warwick-Lane,
Dec. 6. 1726.

A NEW

METHOD

Of Treating

CONSUMPTIONS.

PART I.

CHAP. I.

Of the Advantages that result from a just Theory, in Relation to the Practice of Physick.

I Endeavour'd, in my *New Theory of Physick and Diseases*, to account for all the most perplexing Phænomena's that arise in the Constitution of

the Animal OEconomy, from the mechanical Affections of Matter and Motion.

By Matter, as there apply'd to Animal Bodies, I underſtand that Syſtem of Solids and Fluids that compoſe the human Machine.

Motion is that great Law, as I have there explain'd it, that ſupports the Actions of the whole Fabrick, and by which all its ſeveral Springs are ſet a-going; ſo that neither Health nor Diſeaſes can ſubſiſt in the Body, but as this Principle of Motion is intended or remitted.

Mechanical Affections are Powers or Effects reſulting from the different Modifications of Matter and Motion, and exhibit to our View thoſe diſtinct Ideas that indicate a Body, either in Health, or Labouring under the Violence of a Diſeaſe.

This done, I then go on to examine the conſtituent Principles of human Bodies, their Structure and Mechaniſm, their

their Conſtitutions and Qualities; and have clearly demonſtrated, that Health, and its ſeveral Degrees, reſult from certain regular Motions, conformable to that Syſtem of Solids and Fluids, that compoſe the human Machine. This Harmony of the Conſtitution, reſulting from the regular Motions of the Solids and Fluids, I call the Balance of Nature, or Evenneſs of the Conſtitution, which I have there explain'd, as that Medium wherein the Blood is capable, from its Fineneſs and Fluidity, of paſſing the minuteſt Artery; wherein the ſeveral Secretions are made from the Blood in the exacteſt Proportions; wherein the ſeveral Excrements are excern'd without the leaſt Obſtruction; and, conſequently, wherein the whole Frame of the Animal Conſtitution enjoys the higheſt Perfection of Health.

WHOSOEVER, therefore, has perus'd that Treatiſe, muſt remember, that in the Beginning I divide the Body into two diſtinct Maſſes of Matter, Solids and Fluids; that, to the former I give the Direction of the latter, and to the

Heart I aſſign the Influence of both; the Air I endeavour to ſupport, as the Spring that not only ſets the whole Machine a-going, but what governs and ſupports it in all its various Motions and different Actions during Life.

ENQUIRIES of this Nature naturally enough led me to conſider the Origin of Diſeaſes, their Beginning, Progreſs, and Difference, as alſo their ſeveral Cauſes, Symptoms, and Effects; nor in that vaſt Chain of Thought, which the Difficulty of the Subject naturally led me into, am I conſcious that I have omitted any uſeful Obſervations or Experiments that might ſerve to illuſtrate the whole Theory, whether they relate to the Nature of the Air, the Method of Diet, or the Influence the reſt of the Non-naturals have in diſpoſing our Bodies to receive the Impreſſions of Diſeaſes. This is the Manner I have treated Diſeaſes in that Book; the moſt familiar of which, with all their particular Cauſes, and different Manner of Cures, I have diſtinctly conſider'd in ſeparate Chapters.

Now,

Now, upon reviewing that Treatiſe, I can find no Cauſe to depart from the Principles there laid down, as the Baſis of that Theory, and which I firmly believe, if thoroughly purſu'd, wou'd ſerve as a univerſal Standard in diſcovering the Nature, Cauſe, and Cure of the moſt perplexing Maladies that any way can affect the Conſtitutions of Animal Bodies.

HOWEVER, I am reſolved to proſecute this Diſcourſe upon the ſame Principles, and try whether it is not poſſible to account for all that Variety of Symptoms that attend Conſumptions, through all their ſeveral Stadiums, and in all their different Degrees, from the mechanical Affections of Matter and Motion, without admitting the leaſt Particle of any acid, ſharp, fermenting Liquor to ſolve any Phænomenon.

INDEED, we have lately been told, by a Gentleman of the Profeſſion, notorious for his Writings, that Theories are of little Conſequence in the Practice of

Phyſick; but I hope the following Diſcourſe will convince thoſe Gentlemen, of like Sentiments with himſelf, of their miſtaken Notions, and clear up to the World the great Neceſſity of a juſt Theory, grounded on true Principles, in order to aſcertain a ſucceſsful Practice.

THEY that are converſant in Arts and Sciences, very well know, that there are peculiar Laws and Propoſitions, to which, as a general Standard, they reduce all the Practical Rules that concern any Art. Theſe Laws and Propoſitions, while they only relate to the Cauſe of Action, are ſtyl'd the Principles or Theory of any Art, being a Syſtem of Propoſitions by which we ſolve the Appearances of Things; but when they are applied to the Actions themſelves, we then denominate them practical Propoſitions.

The Nature of Theory and Practice.

THESE Principles, therefore, that direct us to make a right Judgment of the Cauſes, Symptoms, various Effects, and Changes of Diſeaſes, I call ſpeculative Principles, and on which I ground the Theory

Theory of Phyſick; and thoſe Rules or Laws that inſtruct us how to intend or remit the Motions of the Solids and Fluids, while the Body labours under the Violence of a Diſeaſe, ſo as they may retreat within their juſt Balance, I call Practical Principles; which are the Reſult of the former, and on which I found the Practice of Phyſick.

Now, to apply this Reaſoning a little more home to our preſent Purpoſe, upon a juſt Enquiry, we ſhall clearly diſcover that all Diſeaſes have their Cauſes conſtantly certain, and that it is impoſſible for the Wit of Man to conceive how a Body, under the Circumſtances of Health, ſhould fall into a Diſeaſe, without certain prediſpoſing Cauſes to procure it; and Cauſes will always have the ſame certain Effects in producing Phænomena's, that is, the ſame Cauſes will always produce the ſame Diſeaſe in the ſame given Circumſtances; ſo that the Cauſe of any Diſeaſe being once thoroughly diſcover'd, and the Nature and Force of its Symptoms truly aſſign'd, we ſhall eaſily be apprized of the curable

Indications moſt proper to be imployed in order to remove thoſe Cauſes, abating for Difference of Age, Temperature, and Way of Living, which are all Circumſtances eaſily diſcoverable from the Patient himſelf; and therefore, by going upon juſt and right Principles, we ſhall either be able to cure all Diſeaſes, or diſcover the inſuperable Difficulties that indicate their Incurableneſs.

THIS, methinks, is ſo clear a Deſcription of Theory and Practice, that I cannot, for my Life, ſee what can fairly be objected againſt it, or how any of the Arts and Sciences can pretend to more evident Principles, or have their Concluſions grounded on greater Certainty, than this of Phyſick; for if we allow the Body to be conducted upon mechanical Principles, then the Cauſes of Diſeaſes muſt ariſe from the mechanical Motions inverted, which will eaſily diſcover to us all the ſeemingly unequal and irregular Symptoms that attend Diſeaſes, and which are not ſo eaſily accountable by any other Hypotheſis yet handed to the World.

I WAS encouraged to attempt a Diſcourſe upon this Subject from the vaſt Number of People I daily perceived labouring under Decays, Waſtes, and Conſumptions, eſpecially here in *England*, to whoſe Clime it ſeems fatally endemical. I could not but think that a Diſſertation on Conſumptions, managed upon juſt Principles, would be highly acceptable to the Publick, ſince it is a Diſeaſe that threatens all thoſe with the higheſt Degree of Danger, that have the Misfortune to ſuffer under it.

I MUST confeſs that Conſumption, the Subject of the following Pages, is a Word of a very extenſive Signification, and implys all Diſorders that bring any Decay or Waſte upon the Conſtitution; but here I ſhall only uſe it to expreſs thoſe Decays that ariſe from ſome original Taint or Weakneſs, or at leaſt that are not the Product of any other Diſeaſe: And as the Scurvy is the Prelude to moſt other Chronick Diſeaſes, ſo very often it paves the Way to Conſumptions.

Not

Not only the Stone, when attended with frequent Paroxiſms, but alſo the Cholick, greatly impairs the Conſtitution; and of the Bladder ſuffering Decays from a Stone lodg'd in its Cavity, I have treated very largely in my *Treatiſe of the Stone and Gravel.*

ABSTRACTING, therefore, from all other Diſeaſes, my chief Care ſhall be to examine into the original Beginning of Decays, and the Progreſs they make when not timely reliev'd; in which Proceeding I ſhall make ſome trite Obſervations upon the ſeveral Differences and Degrees of Conſumptions, as far as theſe Obſervations incroach not upon the Nature of any other Diſeaſe; for when ſeveral Diſeaſes attend the Body at the ſame Time, it is then, we ſay, the Conſtitution labours under a Complication. Thus, if the Jaundice invade the Body firſt, and its Symptoms attend the Decay through all its ſeveral Stadiums, we call it a Complex Conſumption: If the Symptoms of the Jaundice retreat upon the Invaſion of the Waſte, it then

is

is term'd the Prediſpoſing Cauſe: Of all which in the following Chapters.

I KNOW it is accounted by ſome a Piece of Merit to dare to go out of the common Road; though in my poor Opinion, if the unbeaten Path he intends to tread be not attended with viſible Circumſtances of Truth, and the clear Deduction of Things, in a Chain of Conſequences following each other, his Deviation will but ſerve the more to perplex our Enquiries.

THE cleareſt Way of Reaſoning cloſely, and purſuing our Diſcoveries in Phyſical Searches through the deepeſt Mazes of Nature, is to lay down ſome general Propoſitions, of whoſe Evidence we may be abſolutely certain, and from thence infer a Chain of Concluſions equally as certain.

GIVE me leave, therefore, to cloſe this Diſcourſe with a few Propoſitions, as a Specimen of this Way of Reaſoning, concerning the Nature and Cauſe of Conſumptions, intended as the Baſis of the following Theory. Pro-

Propoſitions demonſtrating the Nature and Cauſe of Decays, Waſtes, and Conſumptions.

PROP. I.

THE cleareſt and propereſt Way to diſcover the Nature of Decays, or the Manner how Bodies begin to decay, is, in the firſt Place, to endeavour to acquaint ourſelves with the Laws of Nutrition, or the Manner, how Bodies receive their Nouriſhment.

PROP. II.

THAT we never can diſcover the Laws of Nutrition, or the Manner how Bodies receive their Nouriſhment, but by endeavouring to acquaint ourſelves with a right Knowledge of thoſe Inſtruments, upon whoſe Action this grand Principle depends.

PROP. III.

THE Inſtruments upon which this grand Principle of Nutrition depends, are the Solids, and the Influences they impreſs upon the Fluids contain'd in their Cavities, by the Force of their elaſtick Spring.

PROP. IV.

THESE Solids are fine Threads or Fibres of different Makes and Arrangements, as they ſerve to the Structure or Mechaniſm of any Part or Organ, and are endued with Machinulæ or Indentations, that compoſe their contractile and diſtractile Powers, in which conſiſts their elaſtick Spring.

PROP. V.

THIS elaſtick Spring gives that equal Impulſe to the Solids, whereby they equally maintain the Circulation of the Blood in every Fibre of the Body.

PROP.

PROP. VI.

THIS equal Circulation of the Blood, thus equally maintain'd in every Fibre of the Body, gives us the Idea of that Balance or Standard of Nature, in which conſiſts the Medium of Health, or the higheſt Perfection of Pleaſure the Body can enjoy.

PROP. VII.

AS this elaſtick Spring of the Solids, therefore, is intended or remitted above or beneath the Balance of Nature, ſo are the Impreſſions of the Solids upon the contain'd Fluids greater or leſſer; ſo is the Circulation of the Blood ſwifter or ſlower; ſo is the Conſiſtence of the Fluids or Juices thicker or thinner; which of conſequence excites Diſeaſes of different Natures in the Animal OEconomy.

PROP

PROP. VIII.

AS an increas'd Elaſticity in the Spring of the Solids, by impreſſing a greater Motion, Heat, and Fluidity upon the Juices, will immediately diſpoſe the Body to Diſeaſes of an acute Nature, ſo, on the contrary, a decreas'd Elaſticity in the Spring of the Fibres, by leſſening the Motion, Heat, and Tenuity of the Fluids, will infer thoſe of a Chronick Diſpoſition.

PROP. IX.

OF all Diſeaſes that come upon the Conſtitution from a Decreaſe in the elaſtick Spring of the Solids, Decays, Waſtes, and Conſumptions, or ſome of their Symptoms, are moſt commonly the firſt that diſcover themſelves.

PROP.

PROP. X.

DECAYS, therefore, being only a Receeding of Nature from her juſt Standard, ariſing from a decreas'd or relax'd Elaſticity in the Spring of the Solids, and from preternatural Coheſions of the Fluids following upon that Decreaſe, and from Obſtructions, Tubercles, ſchirrus Swellings, and ſcrophulous Tumours, forming themſelves in divers of the Viſcera, as the Conſequences of thoſe preternatural Coheſions or Attractions of the Juices; it will follow:

PROP. XI.

THAT thoſe Viſcera will be the Parts firſt affected, where the contractile Powers of the Solids are moſt impair'd, and conſequently leaſt able to make Reſiſtance to the Force of the Juices coming to thoſe Parts, according to the Laws of Circulation, from the Impulſe of the Heart, which will plainly diſcover to us the Seat of the Diſeaſe, and Nature of the Symptoms.

PROP.

PROP. XII.

THE Seat of the Diſeaſe, and the Nature of the Symptoms being clearly diſcover'd from the Parts affected, or from the Feebleneſs of ſome Parts in Relation to others;

COROL. I.

HENCE it follows, that the Cauſe of the Diſeaſe muſt ariſe from a Depreſſion of the Solids beneath the Balance of Nature, and from a Collection of Juices lodging upon the Parts affected, in conſequence of that Depreſſion.

COROL. II.

HENCE it follows, that the Cauſe of the Hectick Fever, and all other ſlow or intermitting Fevers, that attend Conſumptions through all their ſeveral Stadiums, muſt ariſe from Obſtructions and Tumours generated in the Viſcera, from the foreſaid Collection of Juices lodging upon the Parts af-

fected, in conſequence of the Depreſſion of the Solids beneath their natural Standard.

COROL. III.

HENCE it follows, that the Cauſe of the Symptoms, viz. *the ſeveral Diſcharges of Urine, Night-Sweats, Looſeneſs,* &c. *that increaſe the Decay, and haſten on the Conſumption, muſt ariſe immediately from* the* FORCE OF THE HEART NOT DECAYING IN A SIMPLE PROPORTION TO THE RESISTANCE OF THE OTHER PARTS, *or at leaſt,* TO THOSE PARTS MINISTERING TO THE DISCHARGES, *that is,* cæteris paribus, *that the Heart remains ſtronger, while the Body labours under a Conſumption, than any other Part of the Body.*

* Vid. Chap. xiii.

THIS, methinks, is the moſt natural, eaſy Way of diſcovering Truths, when from ſome one firſt Propoſition all the reſt, with their Concluſions, ſucceed in a Chain of neceſſary and unavoidable Conſequences. Theſe Propoſitions are the

Baſis

Baſis of the following Theory, which I hope to clear up from all Difficulties in the ſucceeding Parts of this Diſcourſe.

CHAP. II.

Of NUTRITION.

UPON this Subject I have greatly enlarg'd in my *New Theory of Phyſick and Diſeaſes*, and confirm'd ſeveral Points thereupon I had from Experiments: But as Decay ſignifies a Waſte, and as a Waſte implies a Want of Nouriſhment, ſo I could not ſo well paſs on to conſider the Nature of thoſe Decays, till I had firſt premis'd a Diſcourſe upon the Subject of Nutrition; for the Tranſition is ſo eaſy, from the one State to the other, that the Patient very often is inſenſible of the Change, and wonders how he could decline from ſo good a State of Health without perceiving it.

Of the firſt conſtituent Principles of all Bodies, I have treated pretty largely in my *New Theory of Phyſick*; in this I ſhall only take notice of the Principles reſident in thoſe diſtinct Maſſes of Matter, that compoſe the human Machine. In the Structure of this Fabrick we can perceive nothing but Solids and Fluids, which the Author of our Nature, by a wonderful Mechaniſm, has moſt ſurpriſingly adapted to anſwer the great Ends of Life, in ſupporting the ſeveral Actions of the Animal OEconomy.

These Solids are compos'd of moſt curious fine Threads, or Fibres, ſo wonderfully little, as to remain imperceptible to the Sight, though aſſiſted by the moſt exquiſite and beſt-contriv'd Glaſſes. Every Solid, that is, every Vein, Nerve, Artery, Gland, *&c.* is a Congeries of theſe Fibres finely interwoven, twiſted, and complicated with each other, by whoſe Means the Coheſions of all the Parts are more ſtrongly link'd, ſupported, and maintain'd in their natural Motion, State, and Order, from the groſs

Com-

Compages of the Bones to the minuteſt Diviſion they make in the Termination of the fineſt Gland.

INDEED, the Antients ſuppos'd a *Calidum Innatum* inherent in the Conſtitution, that diffus'd Life and Vigour into all the ſeveral Parts; but it plainly appears, that this native Heat is adventitious, dependent on the Mechaniſm of the Parts, and may be differently intended or remitted, according as the Solids and Fluids are exalted or depreſſed in their Motions above or beneath the Standard of Nature.

OF like Conſequence was the *Humidum Radicale, vel Primogenium*, or, Radical Moiſture, an Opinion ſacredly maintain'd by *Galen*, and almoſt all his Followers; which, according to the antient Way of treating Phyſick, was an innate Principle alſo, and depending on the former; from which two Principles they drew this natural Concluſion, that our Bodies would eternally perſiſt in the ſame Exiſtence, and under the ſame Duration and Form, if thoſe two Principles could

Of the *Calidum Innatum* and *Humidum Radicale*.

but be maintain'd evenly the ſame, without any Variation: But upon a Review of thoſe two Principles, we ſhall diſcover them to be only Effects reſulting from the different Motions of the Solids, and the greater or leſſer Diviſion of the Fluids conſequent thereupon.

Of this I am certain, that both Heat and Moiſture may be intended or remitted in Animal Bodies, from Medicines that have not any heating or moiſtening Qualities in them; and both theſe Principles change their Degrees, and often their Natures, upon divers Occaſions, but eſpecially in old Age.

From theſe two Principles ariſe all the Intemperatures of Hot and Dry, Moiſt and Cold. In acute Diſeaſes the hot and dry Intemperatures generally prevail'd, as did the cold and moiſt in thoſe of a Chronick Nature, in which the Conſtitution was obſerv'd to be, as it were, waſhy, as appear'd in thoſe that labour'd under a Plethorick or Dropſical Habit.

But

BUT ſince the Moderns took upon them to conduct the Body by mechanical Laws, and the new Improvements in Natural Philoſophy, we perceive this *Calidum Innatum*, as alſo this *Humidum Radicale*, to have no real Foundation in Nature, but to be only the mechanical Affections of Matter and Motion, liable to Alterations and Changes, according as the Solids and Fluids are differently intended or remitted.

THESE are the chief Principles on which the Antients grounded moſt of their Theories in Phyſick, and which, as may appear, had nothing but Fancy to ſupport them; for theſe firſt Principles of theirs, *viz.* an innate Heat and radical Moiſture were ſupported upon others, and dependent on the different Motions of the Solids and Fluids; ſo that upon varying theſe Motions, we neceſſarily muſt vary their firſt Principles. The beſt Way, therefore, to judge of the Conſtitution, will be to conſider the Temperature of the Solids; for we ſhall perceive the Conſtitution of Animal Bodies more

or leſs hot or dry, cold or moiſt, according as the Solids are more or leſs ſpringy or relax'd; for while the Solids maintain a good Stricture, they will bang the Fluids about, and divide them to the higheſt Degree of Fluidity neceſſary to preſerve the Body in Health: And this is the Reaſon why hot and dry Conſtitutions are endued with thin and ſpare Habits. On the contrary, in Bodies where the Solids are too much relax'd, the Fluids will want informing, upon which the Conſtitution will be waſhy, as appears to be the Caſe of Dropſical People, and young Girls labouring under the *Febris Alba*, or Green Sickneſs.

Give me Leave now to go on, and conſider the mechanick Laws, by which our Aliment is perfected into Nouriſhment, and the Alterations and Changes it undergoes, before it becomes a Part of our ſelves. Indeed, I may not deny but that Nature ſeems delighted with the Variety of Changes, or the Tranſmutations of Bodies into different Forms and Appearances; of all which Water, that moſt uncompounded Aliment, yields the moſt conſiderable

derable Inſtances. This Fluid is daily ſublim'd from the Sea in Form of Vapour; that Vapour condenſing in the Air, falls upon the Earth in Form of Dews and Rains, whereby it moiſtens the Earth's exterior Strata, and changes into the Subſtance of Plants, Animals, and Minerals. The ſame Fluid, by a different Modification ariſing from Cold, is condens'd into Hail, Snow, and Ice; which, upon the Application of a certain Degree of Heat, are all tranſmutated into their original Form of Water again; ſo powerful and univerſal is this Element in all the Compoſitions of Nature, that I very much queſtion whether any Thing could ſubſiſt, as being what it is, without admitting a certain Quantity of this Fluid in the Compoſition of the Concrete.

The various Changes of Water.

MERCURY is the moſt uncompounded Metal of any yet diſcover'd in the mineral Kingdom; yet, when rightly manag'd by the dextrous Hand of an expert Chymiſt, through what Variety of Shapes is it capable of paſſing, and after all the Scenes and different Forms it has ſuffer'd? how eaſy is it to diveſt it of its foreign Pro-

And of Mercury.

Properties, and reſolve it into the ſame uniform, uncompounded, homogene Body of Mercury again.

Now if we aſcend to contemplate the Structure and Mechaniſm of this little Epitome of the Univerſe, we ſhall diſcover almoſt the ſame Elaborations, Digeſtions, Percolations, and Alterations of the Juices, before they are exalted into a Subſtance fine enough to nouriſh the ſeveral Parts.

The Changes of our Aliment before it is tranſmitted to the Conſtitution for Nouriſhment.

Our Aliment paſſes into the Body under the different Forms of Meat and Drink, which, by the Powers of the Stomach, are quickly converted into one uniform Mixture or Maſs, that appears by the Mycroſcope to conſiſt of white Diaphanous Globles, floating in a clear tranſparent Lymph. This is the firſt Change our Aliment aſſumes after its Deſcent into the Stomach; from whence the new made Chyle, by the Contractile Powers of the Muſcular Coat of this Bowel, is thruſt into the Duodenum, firſt of the ſmall Guts, where the Gall and Pancreatick Juices iſſuing from their reſpective Ducts, ſpoil the former Scene, till the fine Chyloſe Parts preſſing through the

the Lacteals, aſſume again their former Lacteſcent Tranſparency; which the Blood, in the ſubclavian Vein where they firſt meet, changes into a fine flored red Colour. This is the Progreſs the Chyle makes, till by repeated Circulations it loſes all its Chyloſe Nature, and is altered into one homogene Liquor we call Blood, the grand Store-Houſe from whence all Secretions are made, and the ſeveral Parts receive their proper Nouriſhment.

BUT how this Fluid is ſtill further elaborated, what other Changes it ſuffers, and through what Variety of Scenes it paſſes, before it comes to be a part of the Conſtitution, remains ſtill to be conſider'd: Indeed, the Workings of Nature, in the Nouriſhment of Animals, are very myſterious, and we have nothing to guide us in this important Enquiry, but Experiments ſupported with good Reaſonings.

WE have now conducted the Chyle thro' all its different Changes, till it comes to be a red fibrous Liquor we call Blood, the ſmalleſt of whoſe Particles, being more

and

and more divided, change into Serum, a light thin Liquor, in which the red Globles ſwim. Whether or no theſe red Globles may not have ſome Analogy with thoſe white Globles that compoſe the Chyle before it paſs the Stomach, and the Serum with the clear tranſparent Liquor in which they float, is a Queſtion I ſhall leave to the Determination of Gentlemen more converſant in thoſe Experiments: Yet certain I am, that the red Globles change into Serum upon Motion and Diviſion; and the Serum, by the ſame Laws, is exalted into a Fluid fine enough to nouriſh the Body.

As Nutrition entirely depends upon the Exaltation of the Fluids ariſing from the elaſtick Spring of the Solids, ſo Decays follow upon a Relaxation of the ſame Inſtruments of Motion. In all Waſtes or Conſumptions we perceive the Blood thin, poor, and watery, and the Serum in much greater Proportions than the Craſimentum, which ariſes from a Defect in the Spring of the Solids, whereby they cannot work the Chyle into good Blood, nor the Blood into good Nouriſhment; whence

whence the Body is depriv'd of its proper Supplies.

HENCE it follows, that as the Blood moves quicker or ſlower in its Canals, from the Impulſe of the Heart and Arteries, ſo is its Fluidity greater or leſſer, ſo is its Colour more or leſs florid, that is, of a Colour more or leſs deeply red, and of conſequence its Warmth more or leſs, acceeding to, or receeding from the natural Heat of the Body.

That the Fluidity of the Blood depends on its Motion, prov'd from Experiments.

THESE Properties of the Blood, eſpecially its Colour, ſeem to me ſo clearly to depend upon the different Influence of the Solids, and to alter with their Degrees of Motion differently impreſs'd, that I cannot here forbear taking notice of ſome Experiments I made to clear up this Phænomenon.

WE got a good luſty Dog about two Years old, and put his Blood into the higheſt Ferment it was capable of undergoing, by ſoundly ſcourging him with leather Thongs. In this exalted State of the Fluids we open'd the Crural Vein, and

and drew from thence about four Ounces of Blood, which appeared of a fine, bright, red Colour, and did not ſeparate into a Serum and Craſimentum for near nine Hours. The ſame Animal we kept to ſhort Allowance, and quiet, for above ſeven Days, and then open'd the ſame Vein, and diſcharg'd about the like Quantity: But this laſt Extraction, both for Colour and Conſiſtence, was ſo different from the former, that I ſhould not have believ'd they both came from the ſame Animal, had I not myſelf been an Eye-Witneſs of the Experiment. In the firſt Extraction, as I obſerv'd before, the Blood was of a light florid Diſpoſition, and the above-mention'd Time before it perfectly form'd itſelf into a Serum and Craſimentum, and then the Craſimentum was much ſuperior in Quantity. The latter Experiment gave us the View of a poor, thin, watery Blood, in which the Serum greatly exceeded; and the Colour of both was quite different from that fine bright Red, that attended the Blood in the former Experiment.

Now

Now we can perceive nothing in Nature, that could make this Difference in the Blood of the ſame Animal, but the different State of the Solids, at the different Times when it was taken away. While the Solids were ſtimulated to brisk Contractions above the Standard of their Nature, the Veins afforded a Blood in Colour of a fine exalted Red; which Colour was greatly alter'd, as appears from the latter Experiment, after the Motions of the Solids were abated through half-ſtarving the Animal.

BUT we need not altogether depend upon Experiments made on the Brutal Parts of the Creation, ſince we daily meet with ſo many Opportunities of clearing up this Point from Subjects of a more noble Nature, the human Species daily offering themſelves to make the Experiment under different Diſeaſes.

WE perceive in moſt acute Affections, eſpecially the Pleuriſy, that the Blood, when let out, appears of a florid Diſpoſition, moſt of which ſeparates into a Craſimentum;

tum; while in Chronick Diſeaſes, eſpecially where the Solids ſuffer any imminent Decay, it general ſtrikes a dry dirty Colour with a fleſh-colour'd Film encompaſſing its Surface; and under this State moſt of its Subſtance runs into Water, or a taſteleſs inſipid Serum, which greatly proves its impoveriſh'd, crazy Diſpoſition, and that, under ſuch Circumſtances, little of the Chyle can be exalted into Blood, much leſs into Nouriſhment.

THIS is the true Nature of the Blood under theſe different States of the Solids, which clearly diſcovers to us the different Idea of a Body labouring under either an Acute or Chronick Diſeaſe; the Medium of which is that State, that procures to the Body perfect Health, or at leaſt thoſe Degrees it is capable of enjoying in this imperfect State, that is, a perfect Freedom from Pain, and that is when the Motions of the Solids are, in ſuch a Manner, impreſs'd upon the Fluids, as to enable them to paſs the minuteſt Artery without the leaſt Reſiſtance, or only with ſuch a Reſiſtance as may not create any Uneaſineſs or Pain.

INDEED,

INDEED, ſeveral Authors of the laſt Age endeavour'd to diſcover the Principles of the Blood, by ſeverely torturing it in a Chymical Furnace; but all they acquir'd by their Labour and Pains was only to know, that it conſiſted of the ſame Matter, and yielded the ſame Principles, that enter into the Compoſition of all other Bodies in the Univerſe; beſides, by their different Degrees of Fire, they render'd it a quite different Thing from what it is in the Veſſels, and as it exiſts in Circulation: Nor have they ſucceeded better, that have form'd their Experiments upon mixing ſeveral Preparations with this Fluid, to try which would diſſolve, which coagulate it; for thoſe will diſſolve it while in the Veins, that will coagulate it when without the Laws of Circulation, as appears from ſeveral Experiments I have made.

THE beſt, and, I am ſure, the moſt ſucceſsful Method of making Experiments, is, to diſſolve the Preparations in ſome fitting Menſtruum, and either inject the Mixture into the Jugular Vein, or force

The beſt Way of making Experiments, in order to diſcover the Properties of the Blood.

it into the Stomach of a Dog, or other Animal got ready for that Purpoſe. In Experiments this Way made, I have always obſerv'd, that the ſeveral Preparations of Mercury diſſolve the Blood, and kill the Animal by too much rarifying the Fluids, ariſing from the over-heighten'd Contraction of the Solids, excited from the Specula's of the Corroſive Salts wounding the tender Fibres of the nervous Syſtem. To prove this a little more clear, we took a Dog, we had got ready for that Purpoſe, and forc'd a good Quantity of white Sublimate, diſſolv'd in fair Water, into his Stomach, which immediately threw him into Convulſions, of which he inſtantly died; but theſe Symptoms could not ariſe from any immediate Impreſſions of the Sublimate made upon the Brain directly, but from a Convulſion firſt excited in the Stomach Nerves; and theſe, by Conſent, affecting the nervous Fibres of the Pia and Dura Matter, which continu'd the Convulſion to all the Parts of the Body, from that Conſent that all the Parts receive from the two nervous Meninges of the Brain.

UPON Diſſection, we perceiv'd the Stomach all inflam'd, and the Blood in every Veſſel rarified to a ſurpriſing Degree of Fluidity, with all its Particles driven beyond their Spheres of Contact.

SINCE theſe, I have had an Opportunity of making Experiments with Opiate Preparations, and I perceive, that all of them retard the Motions of the Fluids, and conſequently of all the Secretions, by remitting the Contractions of the Solids, which infer a Numbneſs or Palſy upon all the nervous Syſtem; whereupon the Blood's attracting Principle is increas'd, the Circulation ſtopp'd, from whence its higheſt Degree of Coagulation ariſes.

THE Blood thus diſſolving, or coagulating from the different Impreſſions of the Solids, intended or remitted from a different Stimulus ariſing from thoſe different Preparations, will eaſily diſcover the different, immediate Cauſes of all Diſeaſes, or, which is the ſame Thing, the different States of the Solids and Fluids that excite thoſe Diſeaſes, or, to ſpeak more pro-

perly, will eaſily diſcover to us, that the direct Cauſe of all Diſeaſes depends immediately uponthe Contraction of the Solids elevated or depreſs'd above or beneath the Balance of Nature.

THESE Experiments, concerning the Alterations, Changes, and other Properties, the Blood ſuffers from the different Impreſſions of the Solids, excited from the different Affections of different Poiſons, are, in my Opinion, more than a Conjecture, and ariſe to the higheſt Degree of Probability the Caſe will admit of, which, ſtrictly ſpeaking, is the moſt abſolute and concluſive Certainty we can poſſibly receive from Subjects not naturally capable of Demonſtration.

SINCE the Body has been demonſtrated a Syſtem of Solids and Fluids, great Endeavours have been us'd to perſwade the World, that the ſeveral Degrees of the Blood's Heat, Motion, and Fluidity, were ſupported upon fermenting Principles; and though I endeavour'd, in my *New Theory of Phyſick*, to refute this Notion, yet a conſiderable Gentleman, for

for whoſe conſummate Learning, I ſhall always retain a very great Veneration, was pleas'd to inform me, that he could not perceive, that the Principles I had there introduc'd, in Support of the Blood's inteſtine Heat and Motion, did any way differ from the Notion he conceiv'd of its natural Fermentation.

The Difference between Fermentation and the Motion of the Blood ſtated.

To clear up, therefore, this Point from all Difficulties, I ſhall here beg leave to ſtate the Nature of Fermentation, as generally underſtood of fermenting Liquors, and conſider the Difference between it and the inteſtine Heat and Motion of the Blood, which I aver never ferments according to the modern Acceptation of that Word.

By Fermentation, then, I conceive an inteſtine Heat excited from the different Gravities, Motions, and Diviſions, of the Particles that compoſe the Liquors to be fermented in order to a higher Exaltation. To bring about, therefore, a Fermentation in Liquors, it is neceſſary that their Particles ſhould conſiſt of different Gravities that may the more readily diſpoſe them to conflict with each other; from whoſe

mutual Colliſions a Heat will be excited in the Fluids. This Heat will put the ſubtile Particles, or what we call Spirits, impriſon'd or bound up in the viſcid Parts, into Motion, which in Time will ſwell or extend the exterior Cortex, and diſengage them, from their Impriſonment, by breaking through their Encloſures.

THIS is a ſhort Abſtract of the Principles of Fermentation. Now, did not Liquors fermentable conſiſt of Corpuſcles of different Gravities, they could not fall into different Motions, nor divide upon thoſe Motions, nor produce that inteſtine Heat, the Conſequence of thoſe different Motions and Diviſions, and neceſſary in Fermentation. I know there are ſeveral higher Degrees of Fermentation, as that between fix'd Salts and acid Liquors, and eſpecially the Conflict that ariſes from Oil of Vitriol pour'd upon the Filings of Steel; but it is eaſy to conceive that ſuch a hetrogene Exploſion, admitted into the Body every Time the new-made Chyle comes to mix with the Blood, would either burſt the Veſſels, or raiſe ſuch a Tumult and Fever as would

in

in a Moment's Time deſtroy the ſtrongeſt Animal in the Creation.

IN fact, though the Blood receives both Heat and Motion, yet never can theſe Powers ariſe from a fermenting Principle. The Blood never falls into Conflict with itſelf, nor one Part with another, which it would do every Time it receiv'd new Chyle, were it liable to ferment; but ſo far is this Fluid from fermenting, that when let out in inflammatory Diſeaſes, that indicate the higheſt Degree of this ſuppos'd Fermentation, yet, in the Porringer, can we not perceive the leaſt Sign of a Ferment, but, as ſoon as cool, it naturally ſeparates into a Serum and Craſimentum, which diſtinct Properties it continues till the Serum evaporates, and the Craſimentum changes into a Subſtance equal to a Brickbat in Hardneſs.

Now, there is not only a great Difference in the Cauſe of Motion between the Blood and all fermenting Liquors, but alſo in the Effects of that Motion. The Blood receives all Motion, as well

its Inteſtine as Progreſſive, from the Impulſe of the Solids. Fermenting Liquors fall into that Conflict from an inteſtine Motion ariſing from the different Gravities of their Particles, the immediate Cauſe of all Fermentation. The inteſtine Heat of the Blood follows upon Diviſion; but the inteſtine Heat of fermenting Liquors precede their Diviſion. Further, the Particles of the Blood, by their attracting Principle, endeavour to unite after the Force of their Diviſion is taken off, by the Diaſtole of the Heart and Arteries, and would naturally go into preternatural Coheſions, were they not prevented by the ſucceeding Syſtole of the Solids; but the Particles of fermenting Liquors never endeavour to unite after their firſt Diviſion, but fly off from each other, and take their ſeveral Stations, according to their different Specifick Gravities, the groſſer Parts ſubſiding, while the lighter are elevated to the Surface of the Liquor.

The Motion, Heat, and Diviſion of the Blood from the Impulſe of the Solids.

Now he that cannot perceive the Difference between a Fluid's falling into an inteſtine Heat and Motion, from the different Gravities of its Particles; and the Motion,

Motion, Diviſion, and inteſtine Heat of the Blood, ariſing from the Impulſe of the Solids, cannot in my Opinion diſtinguiſh the Difference between fighting and ſtanding ſtill.

INDEED, I may not deny but that the Blood (comprehending under that Term, both the Serum and Craſimentum) is a Fluid conſiſting of Particles of different Gravities, but ſo circumſtantiated, as perhaps, all Things conſider'd, not comparable with any other Fluid in the Univerſe. In the Caſes of Murder, whereever the Particles of Blood happen firſt to ſtrike, eſpecially the Arterial, there they leave ſo ſtrong an Impreſſion, as never after to be eraz'd from the beſt Endeavours that can be us'd. In *Peterborough* Cathedral, the Blood appears viſible to this Day, of a Perſon kill'd on a Marble Tomb-Stone near three hundred Years ago, which is a ſtanding Monument of the great adheſive Qualities of this Fluid; and I purpoſely went to view the Houſe, after Mrs. *Hays* and Aſſociates had murder'd her Husband, and I perceiv'd evidently that the Blood had penetrated

trated half way thro' a Board near an Inch and half thick. I know this Continuance of the Marks of Blood ſo long a Time after the Murder committed, is generally by the Vulgar us'd as an Argument of God's irreconcilable Hatred to this Crime; but here I only intend it as an Argument to prove the great adheſive Force of this Fluid, and its penetrant Nature conſequent thereupon: That if its Particles can divide ſo fine as to paſs the Pores of the moſt compacted Marble, what Paſſages in Animal Bodies can we conceive ſo imperceptibly ſmall, into whoſe Pores it may not inſinuate itſelf. I could go on to infer ſeveral Concluſions from this penetrating Nature of the Blood; but the Laws of Brevity I have ſet myſelf in this Diſcourſe, will not ſuffer me to run further Diviſions upon this Subject.

It is reaſonable to ſuppoſe that the Serum is the red Globles minutely divided; for this Reaſon the Chyle is continually changing into red Globles, the red Globles into Serum, and the Serum into a Lymph fitted for the Purpoſes of Nutrition, the Excrements of which

which I take to be the Matter of Perſpiration, and whether the Animal Spirits themſelves be any Thing more than the ſame Lymph minutely divided, and ſecreted after Diviſion, by the fine Glands of the Brain, is a Queſtion, I muſt confeſs, too difficult for me to determine.

GIVE me leave to ſtrengthen the Arguments I have advanc'd, both here and in my *New Theory of Phyſick*, by an Experiment, which clearly demonſtrates that the ſeveral Degrees of Nutrition entirely depends upon the different Springineſs of the Solids.

An Obſervation taken from the different Temperature of Horſes.

IT is a common Obſervation, that if you take a Waſh-Horſe, and one that Jockeys call a Hard-Horſe, in all Appearance of equal Size, Strength, and Sprightlineſs, and ride them ſo long till both are ſoundly tir'd, or their Fleſh begins greatly to impair; after the Journey is over, though you give both equally the ſame Feeding, yet the Hard-Horſe ſhall much ſooner regain his Plumpneſs than the other, which ſhall droop for a conſiderable Time after. And this Difference

rence we can reſolve into nothing ſo fitly as the different Springineſs of the Vaſcular Syſtem, that the Solids of the Hard-Horſe being tight, can quickly digeſt and readily dance the nutritious Particles thro' all the ſeveral Digeſtions, and eaſily convey them within the Sphere of Contact; while the Solids of the other, through a Laxneſs of its Fibres, can neither ſo well digeſt its Aliment, nor ſo readily convert it into good Nouriſhment, which is the Reaſon why it continues longer before it regains its Fleſh after hard Riding.

Bodies, then, may be ſaid to be well and fitly nouriſh'd, when the Solids, in all the ſeveral Organs that compoſe the human Structure and Mechaniſm, are equally and alike tenſe, firm, and tight; for then they will be capable of exalting the Fluids fine enough to part from the Maſs, in order to join with the Solids for their Nutrition; for as we daily ſee the ſolid Parts repair'd, and no Matter to repair them with but the Fluids, ſo we conclude there is a daily Tranſmutation of Fluids into Solids, which is then effected, when the Particles deſtin'd for Nutrition,

Nutrition, part from the Maſs, and join with the Solids, that is, when the attracting Principle of the Solids over-ballances the attracting Principle of the Fluids towards Fluids; for were not the Nouriſhment continually joining with the impair'd Parts, and conſequently the Fluids continually parting from the Maſs, then the Body in the intermediate Moments, would be under a ſenſible Decay, from the vaſt Quantity of Perſpiration that is, continually, going off from the Body.

IN a well and healthfully nouriſh'd Conſtitution, it is neceſſary that the Gravities of the Particles nouriſhing ſhould be greater than their Surfaces in Proportion to the Quantity of Matter they contain.

BLOATINESS, therefore, will ariſe in all Caſes where the Solidities of the nouriſhing Particles are leſſer than their Surfaces in Proportion to their Quantity of Matter; and nothing contributes more to this unweildy Bulkineſs, than often and frequent drinking ſpiritous Liquors

Corpulency, whence it ariſes.

Liquors after plentifully Feeding upon fat Meats; for all fat Meats, eſpecially Pork and Gooſe, are only hard of Digeſtion, as they conſiſt of a ſoft adipoſe Matter that greaſes the Stomach Fibres, and takes off from their Elaſticity the Cauſe of a good Digeſtion. And hence appears the Reaſon why all bak'd Meats are ſaid to be of difficult Digeſtion; they diſſolve in the Stomach as ſoon as any others, but as they take off from the Elaſticity of its Fibres, and enlarge their Diſtraction, ſo they require a Stimulus that may again reſtore their contractile Powers; and the World, I think, is pretty well agreed, that nothing contracts more than a Dram or two of ſome Cordial ſpiritous Liquor after a Dinner upon Meats that go not eaſily off the Stomach.

How to procure it.

Now, by often feeding upon fat Aliments, or the Fat of Animals, we relax the Syſtem of the Veſſels, and render their contractile Powers too pliable, and by frequent drinking of Drams we expand the Blood and Spirits, and work out the Diameters of the Solids, eſpecially if the Conſtitution be ſound: But

I muſt confeſs, that a plentiful Feeding will not always incline People to grow fat, even where the Conſtitution is ſound, becauſe of the Paſſions, which, in the beſt Conſtitutions, ſometimes ſo far may pervert the Order of the Animal OEconomy, as not to ſuffer the Particles deſtin'd for Nutrition to take any firm Holding.

CHAP. III.

Of the Parts affected in Conſumptions.

I Have obſerv'd in the ſecond Chapter of this Treatiſe, that while the Body continues fitly to be nouriſh'd, there is a Tranſmutation of Aliment into Chyle, of Chyle into Blood, and of Blood into Nouriſhment; but when the Body receeds from its natural Conſtitution, and begins to decay, there is a Retrogreſſion or Change in the Laws of the Animal Conſtituion, whereby the

The Tranſmutation of Solids into Fluids, and Fluids into Solids, very natural in the Changes of the Conſtitution.

the Solids melt down, and are again reſolv'd into a Fluid Maſs, which paſſes off, in the Circulation, by ſome of the ſecreting Portals: And as, in the former Caſe, it is neceſſary, that the Fluids ſhould loſe their Fluidity, and change into Solids, ſo in a conſumptive State it is equally neceſſary, that the Solids ſhould liquify, diſſolve, and melt down from their Adherence to the Conſtitution, and aſſume the Nature of Fluids. A Change, however, thought impoſſible by ſome, (to whom I was diſcourſing on this Subject,) yet, from the very Nature of the Thing, is abſolutely neceſſary, before any Decays can ſeize on the Conſtitution.

As the Body is divided into Solids and Fluids, ſo is it not eaſy to diſcover the Boundaries that determine where the one ends, and the other begins. To prevent any Confuſion that might ariſe on this Head, I, in my late Treatiſe, diſtinguiſh'd their Differences, by conſtituting every Particle of Matter a Fluid that circulates, and thoſe Solids that were plac'd without the Laws of Circulation,

lation, that is, that remain'd attach'd to any particular Part.

The Order and Progreſs of Decays.

Now we are to underſtand, that as ſoon as ever any Body ceaſes to be nouriſh'd, that is, begins to decay, the Parts that firſt ſtart from their Standard, will be thoſe that are moſt ſoft and flexile; and as the Fat of Animals, eſpecially that which plumps up the Muſcles of an human Body, is the moſt pliable; ſo we generally perceive it, and that contain'd in the adipoſe Glands to lead the Way, the Sævum, or that of a harder Texture, going next, and the muſcular fleſhy Subſtance laſt of all. This is the Order in which Decays ariſe upon the Conſtitution, but in all theſe Caſe the Axungia, Sævum, and muſcular fleſhy Matter, muſt firſt melt down and circulate with the Maſs; before they can be diſcharg'd by any of the Evacuations. And to clear this Point from any Objection, I beg leave to relate a Caſe that lately happen'd under my Practice.

I was myſelf concern'd for a Lady labouring under all the Symptoms of a

Conſumption perfectly atrophical. Her Water, every Time it was made, contain'd vaſt Quantities of Fat, that gather'd on the Surface, and harden'd into a Cake of Sævum after it had ſtood ſome Time: This ſhe voided without the leaſt Difficulty or Pain in either the Kidneys or Bladder; which Quantity of Fat, doubtleſs, was detach'd from the Habit, (as appear'd from her daily Waſte,) and excern'd with the Urine, after it had ſuffer'd repeated Circulations.

The Evacuations give the firſt Symptoms of Danger: The Manner of their Diſcharges under Conſumptions.

AFTER the Parts abounding with Fat are in a great Meaſure waſted, then the muſcular fleſhy Fibres begin inſenſibly to give off from the Conſtitution, and they too, it's evident, undergo the ſame Fate; for it's plain, that whenever a Body ceaſes to be nouriſh'd, it begins to decay, whereby the Particles of the Solids change into Fluids, which, circulating with the Maſs and over-filling the Veſſels, either burſt out at the Glands of the Inteſtines, and ſo create a Looſeneſs, a conſtant Attendant on Conſumptions; or if the inteſtinal Glands be ſtrong enough to abide their Impulſe, they then run to the Kidneys, and

and either cauſe a Diabetes, or at leaſt a larger Diſcharge of Urine than the Conſtitution can well bear, or if they find not a ready Vent there, they then take their Way to the cutaneous Emunctories, and are diſcharg'd in profuſe clammy Sweats. And, indeed, this is the moſt commodious Evacuation to diſcharge any Quantity of ſuperfluous Juices by; for the Glands of the Cutis being every where the Extremities of the Veins, Nerves, and Arteries, and the Extremities of the Veins, Nerves, and Arteries, being every where fartheſt from the Center of Heat, it muſt be impoſſible, but they will afford a Paſſage to thoſe Juices, that can find a Vent no where elſe. But, to make this Point a little more clear, we may obſerve, even in healthful Habits, that the attracting Principle of the Blood near the Surface of the Body is much ſtronger than in any of the Parts nearer the Force of the Circulation; for, upon the Application of Cupping-Glaſſes, and Extraction of Blood thereupon, you will perceive the Globles perfectly to cohere, almoſt as ſoon as they are ex-

tracted; which, upon the opening of a Vein, require a longer Time before they go into Contact, and ſeparate the Serum from the Craſimentum.

THESE different Attractions of the Blood's Particles, I take to ariſe from the leſſer Force and Motion the Maſs obtains at the Surface of the Body, in Proportion to what it has in the larger Veſſels; for the nearer the Blood is to the Center of Motion, that is, the Heart, the greater is its Fluidity, and *vice verſa*.

Cauſe of a Hemorrage not from any acid ſharp Juices lodg'd in the Maſs, but from the Fineneſs and Thinneſs of the Veſſels.

BUT if it ſo happen, that this Glut of Juices, charg'd upon the Habit from the Decays of the inward Parts, can prevail with none of the aforeſaid Diſcharges to give way, it then recoiles upon the Habit; and, by its greater inteſtine Motion and new acquir'd Heat, charges a Load upon ſome of the Organs that are weakeſt, and theſe Organs will be weakeſt where the Texture is interwove with the fineſt Fibres, and theſe will be the Lungs.

THE

THE Blood thus iſſuing from the Lungs through a Rupture of their fine Arteries, creates a Hemorrage, or what we call a Spitting of Blood; a Symptom frequently attending thoſe incident to Conſumptions, and which ariſes from the natural Thinneſs of the Coats of the Veſſels, incapable of making Reſiſtance to the Blood's greater Motion from the ſuperior Force of the Heart.

THUS far I have only conſider'd the Parts affected, as far as they relate to the Diſcharges made by the Evacuations under Conſumptions; I ſhall now go on to diſcover the inward Bowels affected; and as the former impair'd Increaſe the Symptoms, ſo we ſhall perceive, that theſe latter cauſe the Diſeaſe.

THE Stomach, of all the Parts inwardly affected, is generally the firſt; and they that are inclinable to Conſumptions, from the Beginning, have a weakly puny Stomach, that is unable to concoct, digeſt, and aſſimulate into good Chyle, the

little they take for Nouriſhment: Hence it follows, that a Glut of crude Juices will be charg'd upon the Habit, which, if often repeated, muſt in Time impair the Action of the Solids, and excite Obſtructions in the ſeveral *Viſcera:* And that *Viſcus* will firſt ſuffer that is weakeſt, and conſequently liable to have its Solids ſooneſt impair'd; and that, next the the Stomach, in Phthiſical Conſumptions, I take to be the Lungs, by reaſon of their fine Make and Texture. But, in Conſumptions atrophical, the *Viſcera*, in the lower Belly, are more liable to ſuffer, eſpecially the Liver and Spleen, which, in Diſſections of thoſe that died tabid, I have often diſcover'd ſtuff'd with impacted Matter, and greatly ſwell'd beyond their natural Bulk and Dimenſions.

But theſe are not the only Bowels liable to be affected in Conſumptions; for the Pancreas, the Omentum, Meſentery Glands, and Peritonæum, are all obſerv'd, more or leſs, to ſuffer from Obſtructions, ſchirrous Swellings, Tubercles, *&c.* And of the Kidneys and Bladder ſuffering Decays, I have taken Notice

tice in my *Treatiſe of the Stone and Gravel.*

BUT tho' we perceive, in Perſons labouring under Conſumptions, all the membranous Parts, and moſt of the Organs, under a ſenſible Decay, yet I very much queſtion whether the Heart ever decays, or at leaſt in Proportion to any of the other Parts. The Difficulties I met with in accounting for the Symptoms of Looſeneſs, Night-Sweats, *&c.* that generally attend the Diſeaſe in its Progreſs, firſt led me into this Way of Thinking, and of forming this Propoſition as the Baſis of the foregoing Diſcharges, *viz.* That in a Conſumption, the Heart decays not in proportion to the other Parts: The Cauſes of which Propoſition, and its Reaſons, and the Grounds upon which we have founded theſe Reaſons, I have reſerv'd as the Subject of the 13th Chapter, where I profeſſedly treat of the Arguments in Defence of the Heart's not decaying in proportion to the other Parts.

CHAP. IV.

Of the Difference of Conſumptions: With ſome Obſervations concerning the Decays incident to Old Age.

I HAVE choſe this Chapter to treat of the Differences of Conſumptions, becauſe they ariſe immediately from the Parts affected; nor had I expended a Chapter in pointing out the ſeveral diſtinct Boundaries of this Diſeaſe, had it not been, that I might more clearly diſcover the Difference between Conſumptions, and thoſe Decays that naturally attend old Age.

Conſumptions by Reaſon of their different Progreſs, juſtly dividable into Acute and Chronick.

ALTHO' all Conſumptions may properly be rang'd under the Claſs of Chronick Diſeaſes, yet by Reaſon of their different Progreſs, they are diſtinguiſh'd into the Acute or Swift, and Chronick or Slow

Slow Conſumptions, which depend greatly upon their quicker or ſlower coming to a Period, and the greater or leſſer Number of Symptoms that attend them in different Habits.

THOSE Perſons that are of a thin, ſlender, tall Conſtitution, of a lively ſparkling Genius, endu'd with a ſmall, ſhrill, ſqueaking Voice, haſty, full of Spirits, and of a ready Wit, are generally ſubject to the Acute Conſumption; while thoſe, on the contrary, of a dull, penſive, melancholy Temperature, of a ſwarthy Complexion, and ſubject to a hollow deep Cough, are liable to Conſumptions of a ſlow lingring Nature. In the former Caſe, the Diſeaſe is quick, acute, and the Patient waſtes apace, which for that Reaſon, by the Vulgar, is often call'd the *Galloping Conſumption:* Its Symptoms ſometimes are ſo violent as to bring the Patient to his Period within the Compaſs of ſix Weeks, or leſs; while the other makes its Progreſs more ſlowly, and lingers out, in ſome Conſtitutions, ſeveral Years.

The general Characters that diſtinguiſh the Acute Conſumption.

As alſo the Chronick Conſumption.

IT

IT is difficult to determine what a Conſumption really is; for if, by that Word, we underſtand all Decays, then we ſhall be oblig'd to take in all Diſeaſes, for moſt Chronick Diſeaſes imply a Waſte, and in Time bring on Decays. Acute Diſeaſes, if extremely violent, are often attended with the ſame Conſequences.

THE Tabes Dorſalis is a Species of Decays diſtinct from either the phthiſical or atrophical Conſumptions, or at leaſt diſtinct in its Cauſes; and a phthiſical Conſumption is very often only a more advanc'd Atrophy, in Conſtitutions where the Lungs are tender, and apt to form Obſtructions, Vomica's, and Ulcers.

THE Atrophy ſignifies an univerſal Decay of the whole vaſcular Conſtitution, but ſometimes is apply'd to the Waſting of a particular Part or Member, and is always without an Ulcer of the Lungs.

IN a Word, I ſhall endeavour to demonſtrate, that under the phthiſical Atrophy, (if I may be allow'd that Expreſſion,) all Decays, Waſtes, and Conſumptions, of what Kind ſoever, may be comprehended; and that it is only a Variation of Symptoms, ariſing from the different Habits, and different Parts affected, in different Perſons, that conſtitute any real, eſſential, ſpecifick Difference; ſo that where a Waſte happens without an Ulcer of the Lungs, we call it an Atrophy; but if an Ulcer affect the Lungs, we then denominate it a Phthiſick, ſo that a Phthiſick may be only a more advanc'd Atrophy; tho' I deny not but that in Conſtitutions where the Lungs are tender, and liable to be affected with Ulcers, it may be, and often is a primary Diſeaſe.

THERE is another Decay different from any of the former, and that is, the Decays of old Age, which altho' not properly a Conſumption, by Reaſon of its ſlow Progreſs, yet we think it no Impropriety of Speech to ſay ſuch a Perſon labours under the Decays of old Age, if we

we perceive him evidently to decline in the latter Stages of Life.

WHAT led me into this Way of Thinking, was the Caſe of Mr. *Meadows*, who, being upwards of Fifty ſix, was by many ſuppos'd to labour under the Effects of Age; but a little after, recovering of ſome conſumptive Symptoms, he regain'd his former Strength; and to this Day enjoys as good State of Health, as ever he did in his Life-time. There ought therefore to be ſome diſtinct Pathogmonick Characters to determine the Boundaries between the Effects of old Age and Conſumptions, or elſe, in ſeveral Circumſtances, we ſhall often be liable to confound the Symptoms of the latter, with the Decrepidneſs of the former, eſpecially when conſumptive Symptoms happen to fall upon People a little advanced in Years.

The Symptoms of old Age.

OLD Age may moſt fitly be defin'd a natural Atrophy, wherein all the muſcular Parts equally decay; and the only Difference I can conceive, is, that the Conſtitution, in old Age, declines more gradual, while in Conſumptions it makes a quicker Progreſs.

INDEED

INDEED theſe Bodies of ours, whether under the Direction of Nature, or ſuffering under the Violence of a Diſeaſe, are in a continual Flux, and never continue in one Stay, as the inſpir'd Writer *Job* very well expreſſes this unſteady Courſe of human Nature; for we perceive him continually upon the Increaſe or Decreaſe of Strength: And as the Time of Youth is, or ought to be, a Time of Vigour and Health, if not obſtructed by an unnatural Way of Living, ſo its Regreſs may be determin'd a Decay undermining the Conſtitution with the ſame gradual Hand, as Nature, in the former State of Youth, advanc'd it. For old Age is a Decay coming upon the Conſtitution tho' a Defect of Nature, or, to ſpeak more plainly, thro' a Failure of the natural Strength of the Solids, whereby they are incapable any longer of influencing the Fluids, or giving them that juſt Degree of Motion neceſſary for carrying on the Actions of Life.

IF we determine the natural Period of human Life, with the Royal Prophet, to be

be ſeventy Years; then by reducing it to half that Number, perhaps we ſhall nearly diſcover the Epocha of Time wherein he arrives at his Meridian of Strength, which I take to be about his thirty fifth Year.

The Difference between Conſumptions attending younger People, and the Decays of old Age.

I MUST confeſs that the Symptoms of Decrepidneſs naturally attending old Age, and thoſe brought on by a Force put upon the Conſtitution of younger People from faſt Living, have a very near Relation to each other; and upon a nicer Obſervation, will be found to agree in ſeveral Particulars, yet what no Author, that I know, treating of this Diſeaſe, has taken the leaſt notice of; and therefore I ſhall intreat the Reader's Patience while I make ſome trite Obſervations upon the Circumſtances that attend Conſumptions in younger, and the Decays natural to People more advanc'd in Years; and I doubt not but we ſhall often obſerve Conſumptions only old Age invading younger People; for ſeveral of the Symptoms that attend Conſumptions may be obſerv'd in People greatly advanc'd

vanc'd in Years, tho' not ſuffering under the Preſſure of any Diſeaſe.

OLD Men are naturally ſubject to cold clammy Sweats, are alſo incident to Coughs, Hoarſeneſſes, and the much Spitting of a viſcid thick Phlegm, which are all Symptoms equally liable to affect younger People naturally conſumptive, or at leaſt beginning to ſuffer under that Diſeaſe. Both are ſubject to Obſtructions of the Liver, Spleen, and other *Viſcera*; and Fluxes are a Symptom from which neither are free. The Hypochondria alſo is an inſeparable Symptom, and both are ſubject to a waſpiſh, quick, paſſionate Diſpoſition.

NOR is there only this Agreement of Symptoms, in thoſe different Stages of Life, but it is poſſible, yea and very common, in this licentious Age, to meet with the Age of Thirty labouring under all the Difficulties of Fourſcore, a ſhaking Head, trembling Hands, weakly Joints, feeble Nerves, a wrinkly Countenance, with a total Failure of Strength, and a univerſal Decay of all the Springs of

of Nature. This Scene of Decrepidneſs have I myſelf beheld in a Perſon under the Age of his twenty ninth Year; and all theſe Symptoms brought on by a Way of living highly, contrary to the Courſe of Nature. When I ſpeak hereafter of a Way of living contrary to the Courſe of Nature, I deſire to be underſtood of a Life led in all Manner of Debauchery, *viz.* in Exceſs of Eating, Drinking, and Wenching; which three Vices enervate the Conſtitution, and deſtroy more Thouſands of Lives, than all the other Cauſes of Death put together.

NOTWITHSTANDING Conſumptions ſeem only to be a haſtening of old Age by the Agreement of their Symptoms, yet, upon a nicer View, we ſhall perceive their immediate Cauſes widely different; for the Flux attending old People, is generally Chylous, proceeding from the Fault of the Stomach and Inteſtines; while the Diſcharge, in People under Conſumptions, ariſes from the Blood, and is the Effect of the Heart's not decaying in Proportion to the other Parts. Beſides, in old Age the Machinulæ of the

the Solids, or their contractile Powers, ſo far as old Age has made its Progreſs, are ſo entirely deſtroy'd, as not to be capable of any further Reparation; but in Decays, Waſtes, and Conſumptions attending younger People, the Machinulæ of the Solids are only relax'd, and are capable of being reſtor'd, if an incurable Ulcer affect not the Lungs, or ſome other principal Part.

IT is, therefore, the fleſhy muſcular Fibres, that, in very old Men, turn cartalaginous, and in ſome bony, that render them incapable any longer of yielding to the counter Action of the Fluids, or receiving any further Repairs from Nouriſhment,and, of conſequence, that unavoidably proves the Deſtruction of the Machine; for while the Solids are only relax'd, and the fleſhy Fibres continue pliable, as generally is the Caſe in Conſumptions, they may be reſtor'd, if not too far impair'd by the Force of the Diſeaſe.

CHAP. V.

Of the præ-exiſting Cauſes of Decays, Waſtes, and Conſumptions.

BEFORE the Pins and Screws of the Conſtitution begin to unrivet, there are ſeveral foreboding Signs, Marks, or Tokens, by which we prognoſticate that the Conſtitution is about to unfaſten. Theſe we call the præ-exiſting, or præ-diſpoſing Cauſes, becauſe they exiſt in the Body before the Invaſion of the Diſeaſe, and depend upon the Parts primarily affected; for there muſt be a Diſpoſition to, before there can be a Generation of a Diſeaſe.

CONSUMPTIONS, in their firſt Beginning, often tread ſoftly, and give but little Warning of their Approach; yet generally ſome foreboding Symptoms may be obſerv'd: I ſhall therefore in this Chapter

Chapter point out thoſe Characters that prognoſticate Danger to the Patient, that having timely Notice of his Enemy's Approaches, he may better be enabled to provide for his Safety.

Hereditary Conſumptions.

THE Symptoms that diſcover the Conſtitution inclinable to Decays, may either be hereditary, or contracted in Time from our own vicious Habits. In the former Caſe the Taint is originally fix'd in the Conſtitution of the Embrio, and interwoven with its firſt Principles of Life. This appears to be the unhappy Fate of ricketty Children, and thoſe incident to ſcrophulous Tumours, and glandulous Swellings about the Neck, Armpits, and other Parts, which generally diſpoſe them to Decays almoſt as ſoon as they are born.

Conſumptions often contracted from vicious Habits.

BUT Conſumptions are not always the Effects of our Parents Vices: They may, and very often do, ariſe from a Manner of Living highly unſuitable to our Conſtitutions; when by faſt Living we overcharge the Solids, and conſequently ſtrain the ſeveral Springs of Life; and as ſome Bodies are ſupported in their firſt original

Conſtitutions upon ſtronger Principles than others, ſo they will continue their Actions regular and ſteady, for a Time more or leſs conſiderable, in Proportion as they obtain a ſtronger or weaker Habit, even againſt the Force of that Part of the Non-naturals they are moſt indulgent to; and this is a Misfortune generally attending the ſtrongeſt Conſtitutions, that, from their obtaining a firm muſcular Habit, pride themſelves in their Strength, and are often drawn to overcharge the Conſtitution with Exceſs, till the repeated Shocks weaken the Habit, and oblige the unhappy Sufferer to look out for Help.

From Weakneſs, or an ill Formation of the Parts.

But Decays, Waſtes, and Conſumptions do not always depend on the Vices of either our Parents or ſelves for their Production, but naturally may ariſe from a Fault, or ill Formation in ſome of the principle Viſcera, This Diſpoſition is moſt commonly diſtinguiſh'd by a thin meagre Habit; a Complexion naturally wan, a ſunken dead Look, through whoſe Veins the Blood appears of a pale, light, blue Hue. They have their Minds finely turn'd to a nice

Taſte

Taſte of Things, are quick, haſty, and unable to bear Diſappointments, or Contradiction, without great Emotion and Diſcompoſure of Spirits, which often impairs the Health, and diſpoſes the Conſtitution to Decays.

SOME fall into a Decay from a Cheſt naturally contracted, while others are diſpos'd to the ſame Affection from a protuberant haunch'd Back, both which are liable to be affected with Coughs, Wheeſings, and Shortneſs of Breathing, Symptoms ever dangerous, and which often portend a ſhort Life to thoſe ſubject to be thus affected; for Perſons of this Complexion and Make, are incident to inflammatory Fevers, hot Lungs, which often diſpoſe this Bowel to Obſtructions, Knots, and ſchirrous Swellings, that, in Time, terminate in a Phthiſick.

Diſeaſes often diſpoſe the Habit to Decays.

As there are peculiar Habits of the Body that prognoſticate Conſumptions, ſo there are Diſeaſes that often threaten, and indeed pave the Way to this Diſeaſe. Severe inflammatory Fevers, eſpecially the Pluriſy, badly cur'd, that is,

where Bleeding has not been plentifully advis'd in the Beginning. Thoſe Perſons that are frequently ſubject to Inflammations of the Lungs, ſeldom eſcape, and Impoſtumes of the Side generally diſpoſe the Conſtitution to a Tabes, as do alſo the ſeverer Kinds of the Small Pox and Meazles.

AMONG Chronick Diſeaſes the Scurvy claims the Preheminence, and lays the Foundation not only of this, but moſt other Indiſpoſitions; for before any Diſeaſe of a Chronick Nature can invade the Conſtitution, it is abſolutely neceſſary that the Habit ſhould be ſcorbutical, whoſe firſt Beginning depends upon the Particles of the Blood going into preternatural Coheſions upon a Relaxation of the Solids, that is, into cloſer Contacts than is conſiſtent with a free Circulation under a ſound State of Health.

THE Scurvy, therefore, is the firſt Diſeaſe that affects the Body after the Solids retreat beneath their natural Standard, whoſe Effects in diſpoſing the Conſtitution to Conſumptions, I ſhould readily go on

on to conſider, if I had not greatly ſupply'd that Defect in my *New Theory of Phyſick and Diſeaſes.* *Vid.* Part iii. Chap. 5.

A COUGH ſometimes not naturally conſumptive, may pave the Way to Decays, eſpecially in Conſtitutions hectically inclin'd, or whoſe Lungs are of a weakly Texture, and ſubject to Catarrhs and Defluxions of Rheum; for Perſons inclinable to the foreſaid Indiſpoſitions are apt to be harraſs'd with Coughs from the leaſt Cold they take, that often chop upon the Lungs, before the Patient is aware, and lay the Foundation of an incurable Phthiſick.

THIS, methinks, ſhould make all People, but eſpecially thoſe of weakly Conſtitutions, exceeding careful, that they ſuffer not a Cough to continue; for it is a dangerous Enemy to play with, and ſeveral, I ſpeak it of my own Knowledge, have greatly endanger'd their Lives by neglecting, in the Beginning, an Indiſpoſition of ſuch ſeeming ſlight Conſequence.

CHAP. VI.

Of the Symptoms of Decays and Waſtes, that firſt ſeize on the Conſtitution after the Solids ſink beneath their natural Standard.

NOthing can be more certain than that the Body is ſubject to Decays: This we evidently perceive from the Breaches daily made in the Conſtitution, how they ſeize upon the ſeveral Parts, and often reduce the Body to a mere Skeleton, is the Queſtion.

DECAYS and Waſtes being only ſofter Words for a Conſumption, and which expreſs its firſt Beginning, I ſhall in this Chapter endeavour to point out the ſeveral Characters, or Diagnoſticks that diſtinguiſh its firſt Stadium.

Now

Now we can perceive no Decays to attend the Conſtitution, till it ceaſes to be nouriſh'd; and it can never ceaſe to be nouriſh'd, according to the Principles I have laid down, till the Solids ſtart from their proper Standard, that is, till they relax or give off from their juſt Tenſity and Firmneſs; and as ſome Conſtitutions are ſupported upon weaker Principles than others, ſo thoſe moſt weak will ſuffer firſt, ſo thoſe moſt ſtrong will ſuffer laſt, and, barring exterior Accidents, the Decays of the Conſtitution will be haſten'd or retarded in Proportion to the Strength or Weakneſs of the Principles that ſupport human Nature.

WHENEVER, therefore, the Solids receed from their proper Stricture, the Body will begin to decay and waſte: Thoſe Decays and Waſtes will firſt diſcover themſelves in thoſe Parts where the Solids are weakeſt, and that will greatly depend upon the different Conſtitution of the Patient; for different Conſtitutions will infer a Difference in the Parts affected, and a Difference in the

Parts

Parts affected, will ſpecify a different Decay: As for Example, an Ulcer, ſeizing upon the Lungs with all its concurring Symptoms, will excite that Species of Conſumptions we call a Phthiſick, which ſame Decay, making its Progreſs without an Ulcer of the Lungs, would rightly paſs for an Atrophy. So the Difference between an acute and chronick Conſumption depends entirely upon the different Temperature of the Patient, and that different Temperature upon the different Springyneſs of the Solids.

THE Springyneſs of the Solids, therefore, relaxing in any Part, will firſt diſcover to us the Parts affected, and conſequently the Seat of the Symptoms, and that is, of the Diſeaſe.

IN Conſumptions, where the general Frame of the Conſtitution gives way, the firſt Symptom we diſcover to make any Impreſſion upon the Body, is the Vapours, or Hypochondria, eſpecially if the Nerves relax at the ſame Time; and, in fact, we always obſerve a Low-Spiritedneſs the firſt Symptom, the Patient

tient complains when the Decay proceeds regularly, and is not haſten'd on by the Appearance of any other Diſeaſe.

A COUGH generally either preceeds or attends the firſt Beginnings of Decays, and, indeed, is the firſt Symptom that gives the Patient any tolerable Uneaſineſs. This Cough is widely different from thoſe that ariſe upon Colds freſhly taken; for a Cough, in this latter State, ariſing upon any dampy Air that may relax the Trachyal Glands, emits a firm ſharp Sound, with a Freeneſs of Reſpiration: Beſides, a Stoppage of the Head generally attends Colds freſhly taken, with a plentiful Diſcharge of ſerous Matter by the Eyes, Noſe, or Pallate. On the contrary, a conſumptive Cough from the impair'd State of the Solids, is generally join'd with a Hoarſeneſs, Sounds flat, hollow, and is ſhort and quick in its Returns. In the the former Caſe, the Spittle is thin in the Beginning, and thickens in its Progreſs. Conſumptive Coughs are always attended with a thick putrid Expectoration, from the firſt Beginning of

Difference of the Cough.

of the Decay, which often turns noiſome in its Progreſs, eſpecially if any Ulcer infeſts the Lungs or Stomach. This Cough alſo greatly varies, as the Conſumption is more or leſs acute or chronick; for in the acute, that is, the Galloping Conſumption, the Cough is always more violent, with but little Intermiſſion; and the Matter expectorated is unconcocted, that is, thin and ſerous, which ſometimes continues ſo to the laſt; for the Phlegm ſpit up in Conſumptions being only the Serum ſecreted, by the bronchial Glands, it will ariſe thicker or thinner in Expectoration, in proportion to the Swiftneſs or Slowneſs of its Secretion; therefore in all acute Conſumptions the Cough will be violent, the Matter ſpit up thin and uncocted. Therefore, in all chronick Conſumptions, or thoſe that make a ſlower Progreſs, the Phelgm will be tougher, more viſcid, and in greater Quantities; but the Cough leſs violent and frequent,

After the Cough has for ſome Time continued to vex the Patient, the Stomach

mach begins to give off from it accuſtom'd Diet, and to demand more delicate Viands. In this Caſe the Patient ſometimes will ſicken at the very Sight of Meat, and diſcharge by Vomit every Thing he eats that is burdenſome to the Stomach, or above the Strength of its Fibres to digeſt. But though Vomiting and a pall'd Appetite be Symptoms that generally attend this Diſeaſe, yet I have known Perſons labouring under Conſumptions, that, to their dying Day, kept up a good Appetite.

Of the Vomiting, and pall'd Appetites.

To theſe Symptoms ſucceed wand'ring Pains of the Breaſt and Side, which, in ſome emaciated Conſtitutions, ſeem, at certain Times, to ſhoot through the Pectoral Muſcles, attended with a Hoarſeneſs and difficult Reſpiration. The Patient grows chilly, is now and then ſubject to Shiverings, as if aguiſh, and even in the Summer is never well, unleſs hovering over the Fire: He now begins evidently to waſte, and glowing Cheeks, and hot Palms of the Hands, are ſure to ſucceed every Meal. Theſe are the Symptoms

Symptoms I have frequently obſerv'd in the firſt Beginning of atrophical Conſumptions.

By and by the Habit begins evidently to waſte, and thoſe Parts ſooneſt give way that are leaſt ſtrongly attach'd to the Conſtitution, and, according to the Nature of Bodies decaying, thoſe will be the Parts moſt abounding with Fat; which, from its ſoft ſpongious Texture, will firſt melt down, and paſs off by ſome of the Evacuations: And this is the Reaſon why we often in Conſumptions diſcover both the Stools and Urine greatly abounding with a greaſy Matter.

The Fat, thus receeding from the Conſtitution of the ſeveral Parts, cauſes all the Muſcles to look meager and thin; for the Fat, beſides its Uſe of giving a more pliable Motion to the Muſcles, is heap'd up in ſuch Quantities to plump up their hollow Interſtices, and render the Aſpect more agreeable, and, which, without ſuch a Support, would look very unſightly.

Of the Diarrhoea.

IN the Beginning of a Conſumption ſometimes the Body is coſtive, which, though to ſome may ſeem a favourable Symptom, yet, in fact, it ſeldom proves ſo; for the ſuperfluous Juices can as well go off by Urine, or an increas'd Perſpiration, as by Stool; but whatever Symptoms may in the Beginning encourage the Patient to hope for a favourable Iſſue to his Diſeaſe, yet in the Progreſs the Patient generally perceives himſelf harraſs'd with a Diarhoea very melting. This melting Flux greatly differs from that ſimple Diarhoea that ariſes from a Diſorder of the Stomach and Inteſtines, and is a Diſcharge directly made from the Blood, ſupported from the Decays of the Solids melting down, and joining with the circulating Maſs, which at laſt burſts out at the Glands of the Inteſtines, and is diſcharg'd in Form of looſe Stools. Theſe Glands are always moſt numerous in the Colon, to let out any Quantity of Juices by this Common-Shore, that cannot readily paſs off by Perſpiration: And it often happens in great Fevers, where Bleeding has not been adminiſter'd in

in the Beginning, that, towards the Height of the Diſeaſe, a Diſcharge is made from the Blood by the Inteſtines, which, generally is the Effect of Nature, and gives great Relief to the Patient.

THIS Diſcharge of Matter, thus made from the Blood, greatly impairs the Patient's Strength; and a dampy Melancholy ſeizes his Spirits from the firſt Invaſion of this Symptom; but the great Misfortune is, that in caſe we ſhould brace the Inteſtines, in order to allay this Flux, and recover the Patient from his Diarhoea, yet no Advantage upon that Succeſs is gain'd in Point of Cure; for the ſame Juices will run to the cutaneous Emunctories, and paſs off in profuſe Sweats, which increaſe the Decay, and bring on greater Ravages upon the Conſtitution; and theſe colliquative Sweats I have always obſerv'd an inſeparable Attendant in all the conſumptive Caſes I ever attended.

Of a Diabetes. A DIABETES ſometimes is a Symptom that ſhews itſelf in the Progreſs of this Diſeaſe, eſpecially if it was brought on

on by hard Drinking, in which Caſe the Urine abounds with ſaccharine Salts undigeſted. This Symptom I ſhould have mention'd in the Progreſs of Conſumptions, becauſe it often ariſes when the Diſeaſe has made conſiderable Advances: But I have obſerv'd it among the prediſpoſing Cauſes; and therefore, as I was willing to mention all the Symptoms, that ariſe from the Evacuations intended, ſo I could not paſs this over without a particular Remark.

BUT the Urine often, in Decays, is diſcharg'd in great Quantities without the leaſt Sweatneſs in Taſte; this I have obſerv'd, in ſeveral Caſes, where it was made as inſipid as pure Water: In others it appears pale and crude, with prodigious Quantities of Fat, which float upon its Surface: And in others, I have obſerv'd it with a farinaceous Sediment, that adher'd to the Urinal-like finely powder'd Coral.

BUT if the glandulous Springs of the Kidneys happen not to give way to the Force of the Blood brought thither

by the Impulſe of the Heart for the Secretion of Urine, then the ſame Juices, or which is the ſame Thing, an equal Quantity, ariſe to the Surface of the Body, and are diſcharg'd by the cutaneous Emunctories.

Of clammy Sweats.

THIS Diſcharge furniſhes thoſe melting Sweats that prove ſo diſturbing to the Patient; for tho' in the Beginning they ſeemingly give ſome Relief by carrying off the Fever, or thoſe ſuperfluous Juices, the Cauſe of the Fever, yet, in the Progreſs, the Patient finds himſelf greatly to waſte after every Diſcharge ſo made, which, at laſt, turns to cold waſhy Sweats, not unlike thoſe that ſometimes attend a Deliquium, eſpecially thoſe that break out in the Forehead and extreme Parts, juſt as the Patient faints in the aforeſaid Diſorder.

BUT ſometimes it ſo happens, that the Juices cannot obtain a Vent by any of the natural Evacuations: In this Caſe, they charge upon the Habit a Quantity of Juices greater than the Conſtitution can well bear; and then they over-ballance the Heart's Action, whereupon an Acute

Acute Fever is excited, which either fatally affects the Patient, or he is reliev'd by an Hemorrage of Blood, iſſuing from the Lungs: This often happensas well in the Beginning, as when the Diſeaſe has made a conſiderable Progreſs. And thus far I have conſider'd the Symptoms that attend the firſt Stadium of this Diſeaſe, under which I comprehend all the Damages that happen to the Conſtitution, from the Evacuations intended or remitted.

CHAP. VII.

Of the Progreſs of the Symptoms.

IN the former Chapter I treated this Diſeaſe under the Title of Decays and Waſtes, becauſe we perceive the Conſtitution ſometime to decay, before it can properly be ſaid to come under the Denomination of a Conſumption: In this I

ſhall conſider the Progreſs it makes, as a Conſumption already begun.

WHEN the preceeding Diſorders are not timely reliev'd, they continue to grow worſe and worſe, and introduce a new Scene of Symptoms, that prove very diſturbing to the Patient; for a greater Quantity of Juices going off from the Habit than the Body can well ſpare, will impair the Action of the Solids, whereby they cannot any longer influence the Fluids ſo, as to diſengage a ſufficient Quantity for the Nouriſhment of the ſeveral Parts. Hence the attracting Principle of the Blood growing ſtronger, from the weaken'd Spring of the Solids, will oblige the Fluids to run into preternatural Contacts, whereby they cannot ſo eaſily paſs the capillary Arteries in Secretion. Hence ariſe Obſtructions in the Liver and Spleen, which lay the Foundation of all thoſe ſchirrous Swellings and Ulcers that attack the ſeveral Viſcera of the lower Belly, as alſo thoſe Hectick Heats that never ceaſe to affect the Habit in the econd Stadium of this Diſeaſe.

Beginning of the Hectick Fever.

THESE

THESE Hectick Heats, in ſome dry Conſtitutions, put on all the Symptoms of an Acute Fever; the Pulſe beats high, the Face and Cheeks redden, and the Veins and Arteries ſtart with Blood: But this Fever, as it does not proceed from the ſame Cauſe, ſo is it not to be treated in the ſame Manner as the Acute continual Fever; for the former generally proceeds from a too large Quantity of Blood charg'd upon the Habit, from the too great Tenſeneſs of the Solids, or from the Elevation of the Arteries above the Balance of Nature; This, from their Depreſſion beneath their natural Standard; whereupon ſome of the principal Organs are obſtructed, which leſſens the Blood's Circuit, and detaches a Quantity of Juices, upon the Habit, greater than the Conſtitution can well bear: This Quantity of Juices, thus ariſing upon the Conſtitution from the Obſtructions of the ſaid Viſcera, is the ſole Cauſe of the Hectick Fever, as we ſhall more plainly diſcover in the Sequel of this Diſcourſe; for now the Blood being render'd more ſlow in its Motions, from the

leſſer Force it receives from the Impreſſions of the Solids, is apt to obſtruct in divers Parts of the Body; theſe Obſtructions, once form'd, will oblige the ſtagnating Juices to remain in the ſame Poſition, as if they conſiſted of ſolid Matter, that is, thoſe ſtagnating Juices will either change into Solids, or remain under the ſame Laws they are ſubject to, or at leaſt, under Laws different from the circulating Fluids; ſo that the Solids, where the impacted Matter reſides, being not able to reſolve or diſcuſs the Obſtructions, will continually receive more and more, till the obſtructed Bowel increaſe into a vaſt Magnitude; and, from this Origin, ſpring thoſe little Tubercles and ſchirrous Swellings, that, very often in Conſumptions, affect the Organs of the lower Belly; hence ariſe Inflammations, Tumours, and Abſceſſes in the Liver, Spleen, Stomach, and other Viſcera, whoſe ſeveral Subſtances I have obſerved upon Diſcretion greatly diſtended, with impacted Matter, above their natural Dimenſions: The Solids, from theſe Obſtructions and ſchirrous Swellings affecting divers Viſcera, charge upon the Heart a greater

Quantity

Quantity of Blood than it can well manage; this greater Quantity of Blood over-ballances its Beatings, and obliges it to redouble its Contractions; and hence ariſes that Hectick Fever, that, in all Conſumptions more or leſs is an inſeparable Symptom.

INDEED, I may not deny but that this Fever often attends ſooner, and by ſome is perceiv'd at the Beginning; but never puts on the Appearance of a perfectly Hectick Fever till the Bowels are obſtructed, and ſome conſiderable Ravages made in the Conſtitution. It may properly enough, in the Beginning of Decays, be call'd that erratick ſlow Fever that generally accompanies moſt Chronick Diſeaſes, eſpecially the Scurvy, and which, from the greater Heat and Dryneſs of the Habit, changes into a Hectick, as the Decay more and more gains Ground.

Symptoms of the ſlow erratick Fever.

IT diſcovers itſelf firſt with a Liſtleſſneſs and Unaptneſs to Motion, which is attended with burning Heats in the Palms of the Hands and Feet, a glowing

Redneſs in the Face and Cheeks, eſpecially after a full Meal, which are all mightily exaſperated towards the Evening. As the Decay gains ground, the Fever increaſes; to which ſucceeds Head-Achs, twitching Pains of the Sides, which come and go; wandering Pains, like the Rheumatiſm, in the Legs and Arms, Back, and Shoulders, great Diſtentions in the Hypochonders, with a Grumbling in the Bowels, and frequent Belching of much Wind from the Stomach. The Legs ſeem feeble, weak, and ſcarce able to bear the Trunk of the Body: By and by his Conſtitution grows hot and dry, and a heavy, dull Melancholy ſeizes upon his Spirits. His Cough increaſes, his Breath ſhortens, and all his other Symptoms are exaſperated. In Bed he is reſtleſs, uneaſy, and his Sleeps troubleſome, till towards the Morning all theſe Symptoms break away in profuſe Sweats; which greatly revives the Patient, and relieves him from his Preſſure.

THE Fit thus ended, the Patient continues in good Plight for ſome little Time, till the Juices charge upon the Habit

Habit as before, repeat the ſame Diſorders, which ſink his Spirits, quaſh his deluded Hopes, and fill his Thoughts with melancholy Reflections; and thus this Diſeaſe continues inſenſibly to gain upon him; better and worſe by Turns, till at laſt the Violence of the Symptoms, and the near Approaches of Death, give him little Reaſon any longer to expect a Recovery; yet moſt ſurprizing it is, that after a Conſumption is confirm'd, and attended with incurable Ulcers of the Lungs, ſome Perſons I have met with ſo bigotted to Life, that they would not only flatter themſelves with a Poſſibility of Recovery, but abſolute Certainty of their doing well; and would talk as unconcernedly of Schemes to be executed, as if they were abſolutely in Health to put them in Practice.

Reaſons why conſumptive People hope, againſt all Poſſibility of Hope.

THIS ſtrong Inclination to Hope, I conceive may ariſe from the Nature of this Diſeaſe, that gives not that Degree of Pain moſt other Chronick Diſeaſes are liable to; for the Progreſs of moſt Conſumptions is ſlow and lingering, and the Pains no ways acute, but rather dull, and attended

tended with Uneaſineſs, as may be obſerv'd in Ulcers of the Lungs. Add to this, that the ſeverer Symptoms, eſpecially the Cough, Hectick Fever, and wandering Pains, entirely diſappear upon the profuſe Sweats, which greatly chear his Temper, and lighten his Diſpoſition, and he perceives himſelf as free, as if no Diſorder had attended him: At theſe Intervals of Eaſe his Spirits dilate, and chear the whole Frame, his Strength returns, or, at leaſt, to him ſeems to return, and his Appetite, in ſome Meaſure, revives; which is no ſmall Addition to his deluded Hopes. This reminds me of a Gentleman labouring under a confirm'd Phthiſis, who found himſelf ſo greatly reliev'd in the Morning, from an Opiate I had order'd him over Night, but three Days before he died, that he aſſur'd me he ſhould overcome his Diſeaſe, and with a compos'd Countenance call'd for a Coach to go and take an Airing; but a few Hours gave another Turn to his Mind, and convinc'd him of the Vainneſs of theſe imaginary Suggeſtions; he fainted, and found all the Symptoms returning, which

in

in a few Days more put an End to his Life and Diſeaſe together.

As the Diſorder gains more and more upon the Conſtitution, the Paſſions begin to be exaſperated, which incline the Patient to a quick haſty Diſpoſition, ever Fault-finding, but never pleas'd with thoſe about him; and this Temper I have obſerv'd in moſt Perſons labouring under phthiſical Conſumptions; they are always uneaſy, complaining, and fretting at every light Diſappointment. Hence ariſe Palpitations of the Heart, Tremors in the Hands, and a Languidneſs and Effeteneſs thro' all the ſeveral Parts; hence the Solids more and more relaxing, will ſuffer the Particles of the Fluids more and more to attract each other; upon which, the Obſtructions become more and more obſtinate, until at laſt the Lungs begin continually to disburthen a vaſt Quantity of Phlegm, that diſpoſes this Bowel to Obſtructions, the Ground of Ulcers; and then the Diſeaſe changes into a Phthiſis or confirm'd Conſumption, which is ſuppos'd by many that fatal Period of Time, beyond which there is no

no Redemption; tho' I doubt not but to make it clearly appear in the ſecond Part of this Diſcourſe, that Ulcers of the Lungs, if timely taken in hand, and rightly manag'd, may be reliev'd, and the Patient entirely cur'd even under that dangerous Symptom.

CHAP. VIII.

Of the Symptoms and Cauſes of a Tabes Dorſalis.

Symptoms of a *Tabes Dorſalis.*

BUT this Diſeaſe ſometimes makes another Stage, under different Characters, and of which I muſt beg leave to take Notice, before I go on to treat of the Symptoms of a confirm'd Phthiſis or Conſumption.

It ariſes from a Cauſe different from either the Atrophical or Phthiſical Conſumption, and by way of Diſtinction is call'd a *Tabes Dorſalis*, becauſe the Seat

Seat of the Diſeaſe is perceiv'd moſt generally to affect the Patient in the Small of his Back.

I HAD not indeed touch'd upon this Subject, had not the Caſe of a very hopeful young Gentleman, Heir to a plentiful Eſtate, furniſh'd me with Materials. He enervated his Conſtitution, and deſtroy'd his Health, by irregular Practices, that, after ſome Time, reduc'd him to an irrecoverable Decay.

THIS Diſeaſe may moſt properly be call'd the *Nervoſe Atrophy*; both in Relation to its Cauſe, and its being attended, in its Progreſs, with ſo many nervous Symptoms.

IN the Beginning, the Body is always coſtive, which increaſe thoſe inſeparable Symptoms of Heat, Fever, and Uneaſineſs; the Hypocondria, Vapours, and Melancholy ever attend; but whether theſe are real Symptoms, or only imaginary, is not eaſy to determine; yet certain I am, that his often reflecting on his irregular Practices, and that himſelf was the

the ſole Cauſe of his Miſery, did not a little increaſe his Apprehenſions of Danger, beyond what really they were, which, tho' generally dangerous, yet often not ſo dangerous as the Patient apprehends, eſpecially in the Beginning.

And this Decay differs from all other Sorts of Conſumptions; that the Patient, from the Beginning, deſpairs of a Cure, when, if rightly manag'd, it is impoſſible he ſhould miſcarry. On the contrary, in both the Phthiſical and Atrophycal Conſumptions the Patient flatters himſelf with the Hopes of Recovery againſt all Poſſibility of Hopes, and when not the leaſt Symptoms indicate any favourable Iſſue to the Diſeaſe.

As this Decay more and more faſtens upon the Conſtitution, and makes a farther Progreſs, a great Pain, with Weakneſs, ſeizes the Small of the Back, and, now and then, a troubleſome Senſation ſeems to deſcend by the Spine upon the Loins; the Patient by degrees grows chilly, and any Air colder than ordinary pierces the Back-Bone. After the Patient has ſome Time ſuffer'd theſe Inconveniences,

veniences, a Languor ſeizes on the Spirits in both Sexes; Women are ſubject to the Vapours; Men to the Hypocondria; both to moving Pains of the Head, wandering Pains of the Legs, Arms, and Joints; both alſo are ſubject to a Weakneſs of all the Senſes, whereupon all Senſation is vitiated; the Eyes ſuffer from Clouds and Miſts that often ſeem to fall before the Sight, and intercept the Light; the Ears ſometimes ſing and tingle, as if ſomething were breeding in their hollow Cavity.

UPON an involuntary Emiſſion of the Succus Genitalis, which is very frequent under this Decay, the Strength ſeems to come away with the Seed, the Patient faints, and lies like a Log, unable ſcarce to turn himſelf; and if the Diſcharge be very large, he ſometimes faints away. The ſame Diſorders attend Women incident to the Whites, who are generally liable to flood during their Naturalia. I viſited a Lady that always fainted away from the vaſt Quantities ſhe diſcharg'd at thoſe accuſtom'd Times.

If this Diſeaſe continues for any conſiderable Time unreliev'd, it often reduces the Patient to Deſparation, with melancholy Reflections, Anxieties, and diſmal Conflicts, as was the Caſe of the unfortunate young Gentleman I above took Notice of; whoſe Perplexity had almoſt tempted him to make away with himſelf.

As the Decay gains Ground, the Symptoms increaſe, the Gleet alſo grows larger, and is diſcharg'd in greater Quantities in any given Time. Women generally are ſubject to the Vapours and Hiſterick Fits; Men to the Hypochondria and Epilepſy, eſpecially if it proceed from a Flooding, or ſeminal Weakneſs. In this Caſe, the Sick is faint, weak, and ſcarce able to turn himſelf in Bed; his Joints tremble, his Bones ach, as if affected with Rheumatick Pains; and if he ſtoops, finds it a Burthen to lift himſelf up again. He ſpits little, and what he does is little alter'd from the Expectoration that attends People under a ſound State of

of Health, ſave that it is a little more viſcid.

THUS he goes on, daily changing from bad to worſe, till all the Symptoms of a confirm'd Maraſmus appear upon him; his former briſk, airy, lively Countenance changes into a pale, faint, and ſullen Complexion; his clouded Eyes ſink into the Sockets, and appear of a deadiſh Aſpect; the Noſe grows ſharp and pinch'd in; the Breaſt and Collar-Bones ſtart up, and are greatly protuberant above the Level of the Cheſt: So that the whole Carcaſs appears not unlike a living Skeleton, or ſtalking Ghoſt.

AT length, from the extreme Weakneſs of the Conſtitution, the colliquative Night-Sweats increaſe, a Looſeneſs ſucceeds, which generally impairs the Patient's Strength. The Urine, that, in the Beginning, diſcover'd a white farinaceous Sediment, is attended, in the Progreſs, with a thick, ſlimy, mucous Matter, that ſubſides to the Sides and Bottom of the Urinal; they are often affected with Pains near the Os Pubis,

and ſometimes with large Diſcharges of bloody Urine: At other Times they dribble, and the Urine comes by Drops, and with Difficulty, as in the Caſe of a Strangury, or a ſlight Fit of the Gravel. Theſe are the Symptoms that attend a Tabes Dorſalis through all its ſeveral Degrees, to which ſucceeds a Swelling of his Legs, which is a ſure Indication, that he cannot long ſurvive his Dolour.

This Diſeaſe often without a Cough or Hoarſeneſs.

It's remarkable, that the Cough and Hoarſeneſs, inſeparable Symptoms in both the Atrophy and Phthiſis, ſeldom appear in the Progreſs of a Tabes Dorſalis; or if they do, are purely accidental, and not of the Eſſence of the Diſeaſe; and what is ſtill more ſurprizing, the Stomach, which, in all other Decays generally, is the firſt and principal Bowel affected, often, in a Tabes, continues firm and tight, and the Appetite good to the laſt.

Or pall'd Appetite.

Now the Reaſon of this Difference, to me appears to ariſe from the different Cauſes that produce the Decay; for a Tabes

Tabes not proceeding, as moſt other Conſumptions, from an over-liberal Indulgence of Meats and Drinks, but from a Sprain put upon a Part fartheſt from the natural Digeſtions, we cannot ſuppoſe they will be ſo ſoon affected as when the ſole Cauſe of the Decay ariſes from an over-frequent charging the Seat of the natural Digeſtions, that is, the Stomach, with vitious Meats and Drinks: This being ſo, the Stomach may continue as long unaffected as any other Part of the Body, which in all other Decays is generally the firſt that ſuffers.

Cauſe of the foregoing Symptoms.

I SHALL now go on to account for the ſeveral Cauſes of the foregoing Symptoms; and altho' this Species of Conſumptions may ariſe from divers Cauſes, as from Fiſtula's, old running Ulcers, Iſſues, the Piles, and any other Drain that may waſte the Conſtitution, yet Gleets not venereal, or thoſe that ariſe from a venereal Taint, are the moſt frequent and general Cauſes of this Diſeaſe.

THESE Gleets ariſe from a Relaxation of the Glands ſeated in the Urethra; and although of little Conſequence in the Beginning, yet if ſuffer'd to continue, often proves the Bane of many a brave Conſtitution.

IN Women alſo, the Glands of the Vagina relaxing from the ſame Cauſes, ſuffer the ſame Matter to drip; though generally, in this Sex, it is ſomewhat more diſcolour'd, which in Time drains the Conſtitution of its proper Juices, and diſpoſes the Body to an irrecoverable Decay.

THEY beſt know that labour under the Diſeaſe, how they came by it. It may ariſe from Strains, Bruiſes, Falls, *&c.* or be the Effects of vicious Practices, which, to illuſtrate further, both Modeſty and Virtue forbid me. It is enough, methinks, that we know the Cauſes, and the beſt Methods of reſtoring the Conſtitution impair'd by any irregular Practices.

WHE-

WHETHER they have ſucceeded better that have gone about to point out to Mortals their unhappy Failings, I think is ſcarce a Queſtion, ſince they have not laid down one Indication proper to be taken, in order to reſtore the Body labouring under Gleets, nor any reaſonable Method or Medicines, that, in any ſingular Inſtance, can effect a ſucceſsful Cure; ſo that their Books are rather writ to amuſe the Reader, than to aſſiſt him in the Relief of his Infirmities.

CHAP. IX.

Of the Diagnoſtick Signs attending a confirm'd Phthiſis, that is, when Ulcers affect the Lungs.

A Conſumption under all the ſeveral foregoing Stages may moſt fitly be ſaid to be a Beginning, or at leaſt only begun; but

once an Ulcer is form'd in the Lungs, it then degenerates into a Phthiſis, which Word generally is ſuppos'd to imply a confirm'd incurable Conſumption.

I HAVE choſe to treat of the Phthiſical Conſumption laſt, becauſe whenever it happens, it generally carries along with it a diſmal Prognoſis, and certainly is the moſt dangerous Symptom that can attend Conſumptions. Before the Formation of the Ulcer, that is, before the Lungs begin to be affected, with proper Management, the ſeveral Ulcers of the Stomach, Kidneys, and other Bowels, may be reliev'd; and I am of Opinion that conſiderable Relief may be given even in the Phthiſical Conſumption, as will appear in the ſecond Part, from the Arguments I have advanc'd in Defence of the Poſſibility of curing Ulcers of the Lungs; but no Hopes of a Cure is to be expected in Caſes where the Ulcer has been of conſiderable Standing, and the Patient draws near to the Verge of Life. In theſe Circumſtances all we can do will be to palliate the Symptoms, and make the Patient eaſy during the remaining

ing Period of Life, which at longeſt cannot be very long.

I KNOW there are thoſe that aſſert the Poſſibility of curing all Ulcers of the Lungs, after they have made conſiderable Breaches in the Conſtitution: I wiſh, for the Benefit of Mankind, that Succeſs may always attend their Practice; but I muſt confeſs, that to me it ſeems ſcarce poſſible that Ulcers of the Lungs, of conſiderable Standing, ſhould receive a Cure, from the Reaſonings I have advanc'd in the ſecond Part of this Diſcourſe, againſt the Poſſibility of curing Ulcers of the Lungs.

INDEED, a Phthiſis is not always introduc'd in the latter Stages of Conſumptions; for ſometimes the Patient is phthiſical from the very firſt Onſet of the Diſeaſe; and the Ulcer is form'd with the firſt Symptoms; but the Reaſon, that induces me to treat of it in this laſt Stage, is, becauſe I was willing to introduce it as the higheſt Degree of Conſumptions, and a Symptom that always preſages the greateſt Danger to the Patient.

Symptoms of a confirm'd Phthiſis.

THE Symptoms that firſt indicate the Lungs affected, are a deep, harſh, dry Cough, attended with a profuſe Expectoration of a thick viſcid Matter, which, as the Diſeaſe increaſes, grows of a yellow, green, or dusky Colour. The Patient, from the firſt Beginning, perceives a great Preſſure upon his Breaſt, with a Shortneſs of Breathing, that greatly diſcompoſes him. I know it is not uncommon to call every ſlight Shortneſs of Breathing a Phthiſick, which is a barbarous Uſage of the Word, and a direct Change of its genuine Meaning, it being, in the propereſt Senſe, only applied to Conſumptions when attended with Ulcers of the Lungs.

THE ſureſt and moſt certain Characters that indicate the Lungs affected, are the much Spitting of a viſcid purulent Matter, attended with difficult Reſpiration, and an oppreſſive Load or Weight upon the Breaſt and Stomach. Theſe are the ſureſt Indications of an Ulcer, eſpecially if you add the hectick Fever always a Concomitant. Some Perſons, indeed,

indeed, have diſcover'd a Phthiſis, as if it were a diſtinct Conſumption; but after the beſt Enquiries I have been able to make, cannot perceive any other Difference than that the Lungs, in ſome Conſtitutions, are apter to be affected than any other Bowel, becauſe their Labes are compos'd of a fine, ſoft, ſpongious, veſiculary Texture, whoſe Fibres are entirely vaſcular, and this denominates it a Phthiſis; while an Ulcer ſeated in the Liver, Spleen, Stomach, or any of the lower Bowels, ſhall only diſpoſe the Body to an Atrophy; and I very much queſtion whether it is poſſible to entertain any Idea of a confirm'd Conſumption without admitting an Ulcer to affect ſome of the principal Bowels.

THE Appetite under a Phthiſis is quite loſt, and the Patient often loaths the very Smell of Meats; and indeed this Senſe of Smelling, if any, is extremely acute under phthiſical Conſumptions, ſince every Blaſt of Air conveys ſome noiſome Hogoo greatly offenſive to the Patient.

As

As the Ulcer enlarges, the Lungs conſume, and all the Symptoms encreaſe. The Cough ſounds hollow, dry, and flat; and if he has any Iſſues, Fiſtula's, or Runnings, they begin to dry up, and afford no further Diſcharge, which is a fatal Preſage. A Pain is perceiv'd in the Side, with ſharp acute Stitches, that increaſe, and are very diſturbing towards the Evening. The Patient now begins to expectorate much putrid, green, viſcid Phlegm, which often ſmells ſo noiſome, as greatly to offend the Viſitants, while they favour the Sick with their Company.

Hectick Fever an inſeparable Symptom.

THE Hectick Fever is an inſeparable Symptom in a Phthiſis, which greatly increaſes towards this laſt Stadium of the Diſeaſe, and is always worſer in the Evenings than Mornings: It occaſions thoſe frequent Fluſhings in the Face, that Redneſs of the Cheeks I have always obſerv'd more or leſs to affect phthiſical People, after a plentiful Meal, or upon drinking a Glaſs or two more than ordinary of any generous Wine. The Pulſe

is

is frequently little, low, quick, but always unequal: Sometimes it hardens a little, eſpecially towards the Evening, at which Time the Patient is attended with great Heat, Thirſt, and a Wheeſing upon the Lungs; he perceives his Strength every Day more and more to Decay, and fail him: His Eyes appear ſunken, and of a deadly Caſt, the Bones every where ſtart up under the Skin, ghaſtly to behold, and the Countenance is pale, thin, and meagre; and gives a faded Aſpect to the whole emaciated Conſtitution: His Legs Arms, and whole Trunk of his Body are quite conſum'd, and appear wither'd.

IN a Word, his Eyes grow hollow, his Noſe ſharp, Mouth and Jaws contracted, and the Bones every where ſtart up under the Skin, which give a hagger'd Aſpect to the whole Complexion.

LASTLY, that I may put an End to this gnawing Vulture, the Night-Sweats increaſe, the Nails of the Fingers bend inwardly, and deaden, the Legs ſwell, the Hair, in ſome, fall off, and the Looſeneſs will admit of no Palliation; upon which

Symptoms of approaching Death.

which the Cough and Expectoration wholly ceaſe; for I have made it a conſtant Obſervation, that the Cough and Expectoration conſiderably leſſen in the very laſt Stages of this Diſeaſe, and entirely go off a Day or two before the Patient expires, whoſe laſt Moments are uſher'd in with a Convulſion, and if extremely weak, it ſometimes takes him off in the firſt Fit; but if he ſurvives that, he never fails going in the next, whoſe Intermiſſion ſeldom continues above a natural Day: So that if the firſt convulſive Fit ſeize him about ſeven of the Clock in the Evening, you may expect its Return the next Day about the ſame Hour, which ſeldom fails to relieve him of his Miſery; the extreme Parts, *viz.* the Hands, Arms, and Legs, firſt giving off from the Duties of Life, are ſucceeded by a Failure of Motion in the Heart, the laſt great Spring of all Motion in Animal Bodies.

CHAP.

CHAP. X.

A Review of the different Opinions of Authors concerning the immediate Cauſe of Decays, Waſtes, and Conſumptions.

BUT before I proceed to examine the real immediate Cauſes of Conſumptions, it will not be foreign to my preſent Purpoſe, if I firſt premiſe a brief Survey of thoſe Cauſes, that hitherto have been alledg'd by Authors of the moſt approved Credit; and examine what Foundation they have in Nature, and upon what Grounds they have founded theſe Cauſes.

Acid ſharp Humours vainly aſſerted as the Cauſe of Conſumptions.

MANY Authors aſſert acid, ſharp, corroding Humours; ſome a putrid, ſharp Blood; others a ſharp, ſaline, volatile Lymph; and not a few have ſupported the Opinion of Worms and Animalculæ's freting or gnawing the Veſſels of the Stomach, Lungs, Liver, &c. to be

be the immediate Cauſes of Conſumptions, and thereby diſpoſe the ſeveral Bowels to Obſtructions, Inflammations, ſchirrous Swellings, and Ulcers, that, in Time, reduce the Body to a confirm'd Phthiſis.

Now, methinks, it was a Duty incumbent on theſe Gentlemen to have demonſtrated the Exiſtence of theſe ſeveral acid, ſharp Juices, before they aſſign'd them as the Cauſe of ſo conſiderable a Diſeaſe; yet nothing of this Nature appears; not one Step can I diſcover in all their Writings, that attempt to clear up this grand Difficulty; nor is there any Symptom in a Body labouring under a Conſumption, that gives the leaſt Indication of their Exiſtence, unleſs we may derive their Being in the Body from an acid Gouſt, that ſometimes ariſes in Belching; but then this will not ſerve the Turn, becauſe it happens moſt frequently to Bodies under the ſoundeſt State of Health; and *Hippocrates* makes it a ſure Indication of Health returning after a dangerous Diarhoea.

No Evidence of their Exiſtence in conſumptive Bodies.

I HAVE made ſeveral Experiments with the different Fluids of the Body; but upon the ſtricteſt Examination, have not been able to diſcover the leaſt Appearance of acid ſharp Humours in the Blood of Perſons labouring under Conſumptions: The Urine often is perfectly taſteleſs, and generally continues ſo thro' all the ſeveral Stadiums of this Diſeaſe. I have alſo examin'd the Blood, eſpecially the Serum, and cannot diſcover the leaſt Acidity, nor ſo much Saltneſs as is generally obſervable in the Blood of healthful Conſtitutions.

IN the Scurvy, that ſeems of all others moſt to favour this Suppoſition of ſharp, ſaline Humours, the Blood that iſſues from putrid Gums is not attended with any ſuperior Saltneſs, to what is obſervable in the Blood of thoſe whoſe Gums are moſt ſound, which is a ſtrong Indication of the Non-exiſtence of theſe Juices, that, then would moſt evidently appear when the Gums are rotten, and almoſt devour'd with the Scurvy.

BUT

Objection. BUT a Gentleman, to whom I was diſcourſing concerning this Subject, was pleaſed to tell me, that acid ſharp Humours, though not perceivable to the Taſte, might yet exiſt in the Blood: But

Anſwer. then this Queſtion recurs, What Certainty can we have of their Exiſtence, if we cannot perceive them when they come ſo near the Senſe of Taſting? Is it poſſible that ſcorbutick, acid, ſharp Humours ſhould invade the Gums, gnaw and eat away their whole Subſtance, and not be diſcoverable to the Taſte? Beſides, we often diſcover the Gums almoſt conſum'd before the leaſt Pain affects thoſe Parts; which could not ſo happen, if they proceeded from acid ſharp Humours vellicating the tender Nerves that compoſe thoſe Parts; and for all Pains affecting the Habit, even the moſt acute, I have endeavour'd, in my *New Theory of Phyſick and Diſeaſes*, to account for from another Origin.

THE Fibres that compoſe the Gums, or any other Part of the Body, may loſe their Springineſs by Relaxation only; and

and this Relaxation will ſuffer the Particles of the Fluids too much to attract each other, and thoſe Attractions will hinder the Blood from nouriſhing the ſeveral Parts, and of Conſequence there will enſue a Decay or Waſte; and the Gums will be moſt liable to this Decay or Waſte, becauſe they conſtitute a Part more hard and compact, and becauſe, from their Structure and Mechaniſm, the Fluids will be apt to ſtagnate in their Subſtance, which often generate Tumours, Swellings, and ſometimes Ulcers in the Gums, from whence ariſe their Decays, and which are inſeparable Attendants on the Scurvy.

FROM theſe Reaſonings and Arguments I think it is evident, that the Abettors of acid ſharp Humours did not do well to eſtabliſh them as Cauſes, before they had thoroughly examin'd whether any ſuch Juices did exiſt in the Body under Conſumptions, or if they did exiſt, from what Origin they did derive their Exiſtence, and in what Parts they were ſeated, and what Glands were appointed for their Separation or Secretion; which were all Points neceſſary to be clear'd

up, before they aſſerted their Exiſtence as Cauſes; for nothing can be more dangerous in Phyſick, than to ground the Cauſes of Diſeaſes upon imaginary Principles: In ſuch Caſes it will be a thouſand to one but that we direct an imaginary Cure.

WERE Conſumptions, indeed, to ariſe from acid, ſharp, ſaline Juices, abounding in the Blood, then the Blood of all conſumptive Perſons would evidently appear crowded with theſe ſaline Juices; then the Pains would be equally as ſharp as thoſe that affect the Body under the Stone and Gout, which we know are the Effects of ſharp, fretting Salts: But the contrary to all this is evident in Conſumptions; the Stitches and Pains that affect the Breaſt, Arms, and Legs, are ſcarce ſo troubleſome as thoſe that attend the Baſtard Pleuriſy. This is the Reaſon why, in many Caſes, the Patient, perceiving himſelf in ſo good a Plight, will ſcarce believe his Caſe ſo dangerous, as it too evidently appears to the Judgment of a diſcerning Phyſician: Therefore as we ſeldom perceive any ſuch Effects, ſo we have

have the greateſt Reaſon to conclude, that, in Conſumptions, there are no ſuch Cauſes to produce them, and conſequently that acid ſharp Salts cannot be ſuppos'd the immediate Cauſe of this Diſeaſe.

NOTHING, indeed, confirm'd me in the Truth of this important Propoſition, that in Conſumptions there is not the leaſt Increaſe of any ſharp corroding Humours in the Blood, then, that, in all the ſeveral Caſes of Decays that came under my Inſpection, I could never diſcover the leaſt Appearance of any Acid, nor that Quantity of Salt neceſſary to preſerve the Body in Health.

Proofs of their Non-exiſtence.

IN a Diabetes the Urine is of a ſweetiſh Taſte, which it acquires from the Salts of the Bile, and which, after it arrives within the Laws of Circulation, the Solids have not a Power to alter through a too great Laxity in their Springs, ſo that the Fluids, under a Diabetes, paſs the Lacteals, enter the Blood, and are, by the Impulſe of the Heart and Arteries, driven to the Kidneys for Secretion, not much chang'd

from what they were, when firſt they join-ed the circulating Maſs. The ſame we ob-ſerve of the Spittle, which is generally ſweet, and neither ſalt nor bitter under this Diſeaſe.

So far, therefore, are the Fluids from acquiring any acid, ſharp, or ſaltiſh Diſ-poſition under Conſumptions, that often-times they contain not that natural Quan-tity of Salts, neceſſary to preſerve the So-lids in Motion; and this Defect of Salts in the Blood ariſes from the languid State of the Arteries, unable to divide the Flu-ids fine enough for their Extraction, which is the Cauſe why all the Motions, in Con-ſumptions, are beneath the Standard of Nature.

THE ſame we obſerve in the Dropſy, the higheſt and laſt Degree of a Conſump-tion, and to which moſt chronick Diſ-eaſes tend, ſooner or later, if they are not prevented by Death. Neither the Urine, nor that vaſt Quantity of Water ſwell'd into the Abdomen, give us any Reaſon to ſuſpect the leaſt Particle of Acid or Salt concern'd in the Formation of that Diſeaſe:

The

The Water that comes from the Belly, upon adminiſtring the Paracenteſis is perfectly taſtleſs, and the Urine does not partake of the leaſt Degree of Saltneſs.

BUT what gave me the greateſt Reaſon to doubt of the Exiſtence of theſe acid, ſharp, ſaline Juices in conſumptive Habits, was, that the Methods eſtabliſh'd for their Cure; and which ſeem moſt properly adapted for anſwering that End, would do very little or nothing in the Cure of Conſumptions; for Experience confirmes it, that nothing is more proper to attemperate ſharp, acid, ſaline Humours, than the Aſſes Milk, teſtacious Powders, Pulvis Haly, Species Diatragacantha Frigida, oily, balſamick Medicines, Barley Ptiſans, *&c.* yet theſe I never could find capable of curing a Conſumption, though frequently preſcrib'd in that Diſeaſe: Theſe ſoftening lubricating Medicines would ſerve very well to mitigate the Symptoms, aſſuage the Pains, and render the Playing of the Muſcles more pliable; but further I never could gain from them.

THIS put me upon further Enquiries into the Nature of Conſumptions; and I am perſuaded that the Cauſes I have endeavour'd to ſupport in the following Chapter, will appear ſufficient to account for all the moſt perplexing Symptoms that any way can affect the Patient through the ſeveral Stages of this Diſeaſe.

FROM theſe Reaſonings and Arguments it will clearly appear, that Decays, Waſtes, and Conſumptions, can never ariſe from either an acid ſharp Blood, a ſerous ſaline Lymph, or fermenting Juices, becauſe the Blood of Conſumptive Perſons leaſt of all abound with either acid or ſaline Particles, as appears from divers Experiments I have made with this Fluid.

WHAT might induce thoſe Gentlemen firſt to attempt to ſolve the Phænomena's of Diſeaſes from acid or alkaline Salts, I ſhall not preſume to determine, unleſs they concluded, that, becauſe acid, ſharp, ſaline Particles externally apply'd to animal Bodies, did conſtantly wound, fret, and tear the tender Coats of the Veſ-

ſels,

ſels, therefore the ſame Salts internally exiſting in the Body, muſt produce the ſame Effects: But then, as I obſerv'd before, it was incumbent on the Abettors of this Opinion, to have demonſtrated the Exiſtence of theſe Principles, before they aſſign'd them as Cauſes.

I MAY, perhaps, be ſuppos'd to have launch'd out more than is neceſſary againſt thoſe acid ſharp Humours; but whoever will conſider, that the acting upon ſuppoſitious Principles will introduce a ſuppoſitious Practice, and conſequently endanger the Cure of Diſeaſes, will not think me too particular in this Digreſſion, eſpecially if they add (to what I have here related) the Reaſonings I have delivered in my * *New Theory of Phyſick and Diſeaſes*, concerning the Origin of Pains, both acute and chronick.

* *Vid.* Page 119. p. 141.

CHAP. XI.

Of the real immediate Cauſe of Decays, Waſtes, and Conſumptions.

IN my *New Theory of Phyſick and Diſeaſes*, as alſo in my *Treatiſe upon the Stone and Gravel*, I have reaſon'd on the Subject of Diſeaſes, from their moſt general, to their moſt immediate Cauſes; and, in the cleareſt Manner, have endeavour'd to prove, that from the Non-naturals intending or remitting differently, the Evacuations ariſe the firſt or moſt remote Cauſe of all Diſorders; and from the Evacuations intending or remitting differently the Syſtem of the Solids, proceed the proximate Cauſe; and from the Syſtem of the Solids differently affecting the ſeveral Fluids, and the Parts or Organs through which they circulate, immediately ariſe all the Diſ-

orders

orders that any way can affect the Conſtitution of animal Bodies.

BUT in this I ſhall invert that Order, and endeavour to diſcover from the moſt immediate, the general Cauſes of all Diſorders that any way can affect, vitiate, or embaraſs the Structure and Mechaniſm of the Solids and Fluids under Conſumptions; that the Reader, from this different View, may more clearly ſee the Chain of Cauſes, Effects, and their Conſequences that overturn the Balance of the animal OEconomy.

When we go upon right Principles, the Cauſes will clearly appear, whether we reaſon from the Generals to Particulars, or from Particulars to general Cauſes.

INDEED we have been told by a late Writer, that the Inveſtigation of the immediate Cauſes of Diſeaſes is above the Reach of human Knowledge to diſcover, and that they are no ways neceſſary to qualify a Phyſician for Practice; when its evident, that all that Collection of Symptoms that conſtitutes the Diſeaſe, and ſpecifies its different Nature, are entirely depending upon the immediate Cauſe; and I think it is impoſſible to conceive how we can pretend to relieve the Symptoms, or cure the Diſeaſe, without thoroughly under-

underſtanding the Grounds upon which they ſubſiſt, and are ſupported.

My Intention therefore in this Chapter, is to diſcover the immediate Cauſes of all the moſt perplexing Symptoms, that any way can affect the Body under Decays, Waſtes, and Conſumptions, as neceſſary to give the Reader a right Underſtanding of their ſeveral Indications of Cure.

In the former Chapter I have endeavour'd to prove, in the cleareſt Manner, that no acid, ſharp, fermenting Humours can be aſſign'd as the genuine Cauſes of Decays; therefore the Symptoms we have taken notice of in their proper Places, as the proper Characters that conſtitute the peculiar Eſſence of Conſumptions, muſt ariſe from ſome other Origin: Therefore it is reaſonable to ſuppoſe, that the juſt and adequate Cauſe of all Decays, Waſtes, and Conſumptions muſt ariſe from the contractile Powers of the Solids depreſs'd beneath the Balance of Nature, and from the Attraction or preternatural Coheſions of the Fluids following thereupon, and

from

from Obſtructions, ſchirrous Swellings, and Ulcers, forming themſelves upon the ſeveral Bowels, in conſequence of thoſe Attractions and preternatural Coheſions.

The real Cauſes of Conſumptions accounted for.

To make this a little more plain: The Cauſes of Conſumptions will then begin to exert themſelves, when the Conſtitution of the Body leaves off to be nouriſh'd; and the Conſtitution of the Body will then leave off to be nouriſh'd, whenever the Particles of the Fluids run into too cloſe Contacts or Coheſions, and the Particles of the Fluids will then run into too cloſe Contacts or Coheſions, whenever the Springs of the Solids are too much relax'd. This is the Beginning of Decays, wherein the Solids too much abate and recede from their proper Stricture, changing their Principle of Attraction into that of Repulſion: The Cauſe of that Change ariſes from their loſing their Elaſticity or Spring: The Cauſe of that Loſs proceeds from the Non-naturals, of which hereafter.

UPON theſe Changes the Body loſes its natural Motions: Upon theſe Motions im-

impair'd, the Body loſes its natural Heat, and conſequently grows more chilly: This Chilneſs ariſes from the Depreſſion of the Solids, and the Slowneſs of Secretion conſequent thereupon, whereby the Blood cannot ſeparate thoſe Quantities of Spirits neceſſary to influence the ſeveral Actions of Life; and the Blood cannot divide ſo finely, nor afford a fitting Quantity of Animal Spirits, becauſe the Solids are relax'd, and becauſe, under that Relaxation, they recede beneath their natural Standard, and conſequently cannot impreſs that Impetus or Force upon the Fluids neceſſary to their Diviſions, and upon which the natural Heat of the Body depends: Therefore does the Blood run into preternatural Coheſions; therefore does the Body grow chill and languid in all its ſeveral Actions.

Cauſes of the Changes in the Blood.

FROM the Spring of the Solids thus impair'd ariſe all the Alterations and Changes the Blood ſuffers, as well in Colour as Conſiſtence; for whereas the Blood of moſt People, under a healthful Temperature, upon Veneſection appears of a fine deep red Colour, it on the contrary, in thoſe

those Conſtitutions labouring under Decays, changes into a paler Hue and thicker Conſiſtence, environ'd with a fleſh-colour'd Film. And this Phænomenon I believe, may ariſe from the Globles of the Blood being larger under this viſcid State, which of conſequence refract leſs; for all Fluids refract more or leſs, the more or leſs they are divided; and this is the Reaſon why the arterial Blood is more florid than the venal, and ſome Parts of the venal more florid than others.

THAT white Film, that we ſo often perceive to float upon the Surface of the Blood of ſcorbutick Habits, and the firſt Beginning of Decays, ariſes only from the lighter Parts of the Craſimentum ſettling laſt to its Center; for, according to the Laws of Motion, Bodies gravitate in Proportion to their different Denſities, as appears from Bodies of different Denſities, but of the ſame Bulk ſuſpended in Water; therefore it will follow, that the pale or fleſh-colour'd Film, conſiſting of the lighteſt Particles of the Blood, and Particles of the Chyle ſcarce alter'd into Blood, will

will ſubſide and take their Places laſt, according to their different ſpecifick Gravities, and of conſequence prove a Covering to the Surface of the Craſimentum; for the Spring of the Solids being greatly impair'd, can exalt but a ſmall Quantity of the Chyle into a Fluid fine enough to join with the Blood, and conſequently but little of that Blood into Nouriſhment, in order to repair the Conſtitution under a Conſumption.

THUS far we have endeavour'd to diſcover the Decays of the Habit, and the Properties the Blood acquires under this Diſeaſe; I ſhall now go on to conſider how the ſame Inſtruments of Motion excite the other Symptoms and Characters that conſtitute the Nature and Eſſence of this Diſeaſe.

Cauſe of the Symptoms.

Now the immediate Cauſe of the Symptoms being the ſame with the Diſeaſe, and the Diſeaſe ariſing upon the Conſtitution from a Depreſſion of the Solids beneath their natural Standard, it will follow, that their contractile Powers, or elaſtick Spring, will firſt give way in thoſe

thoſe Parts that are furtheſt from the Center of Heat; and they are furtheſt from the Center of Heat, that are at greateſt Diſtance from the Heart; and they are at greateſt Diſtance from the Heart, that compoſe the Structure and Mechaniſm of thoſe Parts neareſt the Extremities of the Body, which are the Legs, Ancles, and their Appendages, the Fingers and Toes; and for this Reaſon the Ancles give the firſt Indication of Decays, from their Pitting upon any Impreſſion made with the Finger, eſpecially towards the Evening, in all Conſtitutions affected with the Scurvy, which I take to be only the firſt Beginning of a Decay.

INDEED, as the Solids more and more relax, the Decays more and more gain Ground; ſo that towards the latter Stages of Conſumptions, the Legs greatly ſwell from the Viſcidneſs of the Juices, and their Aptneſs, under ſuch Circumſtances, to ſtagnate, which is always in Proportion to the Effeteneſs and Languidneſs of the Solids.

AFTER

AFTER theſe firſt Symptoms are, from ſuch Cauſes as we have here aſſign'd, form'd; the Juices go on to excite Obſtructions in divers other Parts of the Body; and thoſe Organs will always be diſpos'd to be firſt affected, that are incapable from their Weakneſs (either hereditary or caſual) to make Reſiſtance to the Juices, and theſe are the Stomach and Bowels.

The Stomach generally firſt affected in Conſumptions, and why.

IN all Decays we generally perceive the Stomach the firſt Bowel affected, and with good Reaſon, ſince it is the Store-Houſe that miniſters Supplies to every individual Nerve and Fibre of the Body.

THE Author of Nature has ſo wonderfully contriv'd the Structure and Mechaniſm of this Bowel, that an Appetite we call Hunger muſt neceſſarily ariſe, whenever it becomes near empty, this Appetite is excited from the Attrition that the Fibres of the inner nervous Coat make on each other, which, by their exquiſite Senſations, greatly affect the Brain and Seat of the

the common Senſory, whereby the Mind is deſirous of Supplies, to appeaſe the Cravings of the Stomach, always uneaſy while empty, and in Proportion to its Emptineſs.

THUS far of the Cauſe of Appetite natural to the Conſtitution; I ſhall now proceed to examine the Reaſon why it often is not only defective, but vitiated to a very high Degree; for Loathing (which is more than a bare Want of Appetite) is a Senſation produc'd in the Stomach, directly contrary to the Appetite ariſing from Hunger, and moſt commonly attends Decays, Waſtes, and Conſumptions, and increaſes with the Diſeaſe; ſo that towards its latter Stages, the very Smell of Meat proves highly offenſive to ſome nice Conſtitutions.

IN accounting for the Diſorders of the Stomach, we are to conſider, that as the natural Appetite depends on a due Modulation of the Stomach-Nerves, and the Conſent they hold with thoſe of the Brain, ſo the ſeveral Degrees of Appetite and Loathing, will appear entirely to ariſe from an Encreaſe or Decreaſe in

the elaſtick Springineſs of the Fibres that compoſe the Structure and Mechaniſm of this Bowel.

The Cauſe of an increas'd Appetite.

Now if the Fibres happen to be over-tightly brac'd or contracted, the Impreſſions they make upon the ingeſted Aliments, will be over-ſmart, and Digeſtion perform'd in leſs Time than the Courſe of Nature requires it ſhould be; and from hence ariſes the Bulimia, or Ravening, and all devouring Appetite; an Appetite ſo keen, from the quick Digeſtion of the ingeſted Meats, that the Patient is very uneaſy unleſs he be continually a-cramming; whence, by ſome, it is call'd *Appetitus Caninus*, or Dog-like Appetite.

I MUST confeſs, an increas'd Appetite is a very uncommon Diſorder, and ariſes more from the Quality than Quantity of Meats we take for our Aliment. It often is the Effect of acid ſharp Liquors that brace and purſe up the Fibres of this Bowel, whereby the Appetite is greatly increas'd.

Ox

ON the contrary, if the Solids be too much relax'd, or abated in their Stricture or Springineſs, they will decreaſe the Appetite, and introduce a Nauſea, or Loathing, which is a Senſation diametrically oppoſite to the former, and which proceeds from the Stomach-Fibres too much relax'd; for all true Senſation, in any Part, proceeds from a due Modulation of the Nerves, and every Deviation from their natural Standard is more or leſs a Deviating from their healthful State. Cauſe of a decreas'd Appetite.

Now the Stomach-Fibres being greatly impair'd from the continual Glut of Juices charg'd upon this Bowel, cannot concoct, digeſt and detach off that Load of Phlegm, that, often in Conſumptions, lies impacted in the Folds of the Stomach, and is the ſole Cauſe of that Nauſea, Want of Appetite, and Indigeſtion, that moſt generally attends this Diſeaſe; for Phlegm, as I obſerv'd before, being only the Serum of the Blood ſlowly ſecreted, and ſlowly ſecreted becauſe the Glands of the Stomach, as well as the Stomach-Fibres, are too much relax'd, it will follow, that the Phlegm can-

not be ſaid ſo properly to be the immediate Cauſe, as the Effect of Indigeſtion and Want of Appetite.

BUT to make this Point a little more clear, we are to conſider that the Stomach abounds with innumerable little ſmall Glands, that ſeparate from the Blood a clear fine Lymph, for duly moiſtening of the Aliments, in Caſes where a ſufficient Quantity of Fluids is not charg'd into the Stomach for that Purpoſe; but if the Tone of the Stomach happens to be relax'd, the Blood will make a ſlower Progreſs in its Fibres, and the Stomach-Glands, inſtead of this fine Lymph, will ſecrete a thick, craſs, viſcid Phlegm, that will burden the Stomach, and render the Patient ſubject to Reachings, and ſometimes Vomitings, eſpecially after a plentiful Repaſt.

AND hence ariſes the Cauſe of that intenſe Thirſt, that often attends conſumptive Habits; for the Glands of the Stomach being greatly obſtructed by the Viſcidity of the Juices thither brought for Secretion, it will neceſſarily follow, that

that this Bowel will grow thirſty for Want of a proper Diluter to attenuate, diſſolve, and digeſt off that Load of viſcid Phlegm, the Patient finds ſo troubleſome to his Stomach.

WHEN Things come to this paſs, the Stomach and other Viſcera I have obſerved very much infeſted with ſchirrous Swellings, that form themſelves between the Tunicks of this Bowel. Theſe Swellings or Tumours ariſe from the Particles of Phlegm going into two cloſe Contacts, which in ſome impoſtumate, and prove of deadly Conſequence upon their Breaking.

IN the Progreſs of the Decay, all the other Viſcera are liable to the like Impreſſions, from the general Relaxation of the vaſcular Syſtem; all, I ſay, but the Heart, which, as I ſhall endeavour to prove hereafter, decays not in Proportion to the other Parts.

THE Liver and Spleen, now from the attracting Principle of the Blood increas'd, begin to form Obſtructions, which, in ſome

Cauſe of the Obſtructions and ſchirrous Swellings that affect the Liver, Spleen, &c.

ſome hot bilioſe Conſtitutions, inflame and turn to Ulcers, while the ſame Obſtructions, in cold phlegmatick Habits, where the contractile Powers of the Solids are weaker, and the Motions of the Fluids ſlower, do not inflame, but terminate in Knots, Tubercles, or ſchirrous Swellings, which in Diſſections I have found vaſtly to diſtend thoſe Bowels above their natural Dimenſions.

THE Liver, Spleen, Stomach, Inteſtines, *&c.* being thus crowded with Obſtructions, intercept that juſt Quantity of Blood, that naturally ought to circulate through theſe Bowels; whereupon a greater Glut is charg'd upon thoſe Viſcera unobſtructed, which excites thoſe hectick Heats that never leave him, till either the Obſtructions are diſcuſs'd, or Death gives the finiſhing Stroke to all his Miſery.

THE Sum of this Argument, which I beg leave to clear up a little plainer, is, that Obſtructions in any of the Viſcera will leſſen the Blood's Circuit, and of conſequence infer a Plethora, and a

Plethora

Plethora will over-balance the Heart's Motion, and the Heart's Motion over-balanc'd will increaſe the Blood's Motion, Diviſion, and Heat; and the Blood's Motion, Diviſion, and Heat increas'd, will excite a Fever of the hectick Kind. This Fever will not be continual, but riſe and fall according as the Obſtructions more or leſs gain Ground, and according as more or leſs new Aliment is charg'd into the Blood after every Repaſt; and this is the Reaſon why the Symptoms of the Hectick Fever are always exaſperated after a full Meal, becauſe then, from the new ingeſted Aliment, there is charg'd into the Blood a new Load of Chyle, which obliges the Heart to redouble its Impulſe, in order to attenuate, digeſt, and diſſolve the Viſcidities of its Particles, and fit them for the ſeveral Offices of the Animal OEconomy.

THIS is a Demonſtration, methinks, ſo clear of the Cauſes and Effects of the Hectick Fever, that I cannot, for my Life, conceive what can fairly be objected againſt it; the Difference, therefore, between the Cauſes of a Hectick and

continual Fever, will ariſe from hence; that the former is excited from Obſtructions lodging upon ſome of the Viſcera, or Organs that inwardly affect the Habit, while the latter moſt generally is the Effects of an obſtructed Perſpiration.

WHEN the Blood is in this viſcid State, from a general Relaxation of the vaſcular Syſtem, that Portion of it ſent to the Brain, and deſtin'd for the Secretion of the animal Spirits will afford but a ſmall Quantity under theſe Circumſtances, in Proportion to what is neceſſary to conduct the animal Actions under a ſound and regular State of Health; and hence it follows, that the Mind grows fearful, timerous, and melancholy; the Paſſions ſtrong, irregular, and apt to diſorderly Sallies; upon which the Patient is waſpiſh, touchy, fretful at the leaſt Diſappointment, and diſpleas'd both with himſelf and all about him.

Cauſe of the Cough.

THESE Symptoms of hectick Fever and Uneaſineſs, ariſing from ſuch Cauſes, as we have here aſſign'd, all continue to increaſe,

increaſe, till the Glands of the Wind-Pipe begin to relax, and ſecrete a greater Quantity of that ſerous Lymph, (whoſe Office is to moiſten the Trachea, and keep its inner Surface even,) then thoſe Glands naturally afford; whereupon a Hoarſeneſs enſues.

THIS Hoarſeneſs only proceeds from the unequal Surface of the inner glandulous Coat of the Trachea, and very often ariſes from the Body's being too much expos'd to the open Air; but in this Caſe it is the Effects of a general Relaxation of the Solids, upon which the Bronchia ſuffers a ſuperfluous ſerous Lymph to drill down its Surface, which irritating its fine Nerves, excites that convulſive Motion of the Wind-Pipe we call a Cough.

THE Action of Coughing, (if I may be allow'd to call it an Action,) ſeems to me a Compoſition of two Motions directly oppoſite, *viz.* of Inſpiration and Expiration: Inſpiration is the Charge, and Expiration the Diſcharge; and the Cough is the Effects of the latter, to unburden

The Action of Coughing, how performed.

burden the Trachea of its ſuperfluous Moiſture. This ſuperfluous Moiſture, by a Shake, Jar, or Twang of the Wind-Pipe, ariſing from a violent Expiration, the Cauſe of the Cough, is turn'd into a fine ſubtile Halitus or Gaſs, which ariſes with the Force, and for that Time eaſes the Patient of his Preſſure; and as the Trachea is more or leſs even, and the Expiration more or leſs ſudden or quick, ſo is the Cough more or leſs diſtinct; though I muſt confeſs the Sound of the Cough ſeems, in ſome meaſure, to depend on the Force or Percuſſion with which the fine Halitus ſtrikes the external Air at its firſt Diſcharge from the Wind-Pipe, in the Nature of Exploſions made by ſeveral Bodies ſtrongly vibrated againſt the Air.

But as long as the ſame Cauſe remains, ſo long will the ſame Oppreſſion return, and call continually for the ſame Means to remove it, that is, the Frequency of Coughing will return in Proportion to the Quantity of Matter ſecreted by the Tracheal Glands, and the Time that Matter is a-ſecreting.

The

THE Sound of the Cough is differently modulated, according as the upper Part of the Epiglottis is differently affected: If it be dry, then the Cough ſounds hollow; if moiſt, then harſh, attended with a Hoarſeneſs. The Cough of ſome, under a Tabes Dorſalis, I have obſerv'd to ſound like the Crow of a Turkey-Cock, which I take to be little different from the Cough of a Eunuch. And thus we account for thoſe Catarrhs and Defluxions of Rheum, that the Antients ſuppos'd fell from the Head upon the Palate and Lungs, and which indeed are the Effects of the Bronchial Glands, after they have loſt their Springineſs.

SOMETIMES the Violence of the Cough ſhakes the Lungs and intercoſtal Muſcles, which excites in the Sides Pains not unlike thoſe that accompany the Baſtard Pleuriſy, in which Caſe the Matter expectorated is often rais'd with Streaks of Blood. Hence the Cauſes continuing, the Symptoms all increaſe; and now the Lungs begin to disburden a larger Quantity of putrid Phlegm, which

which gives the firſt Warning of an approaching Phthiſis.

THUS far having proceeded to account for the Cauſes of the Symptoms that affect the Patient in the firſt and ſecond Stages of Conſumptions, I come now to conſider it when it degenerates into a Phthiſis, which ariſes from Obſtructions of the Lungs not always making this gradual Progreſs; for ſometimes a Phthiſis is beforehand, and the Lungs affected the firſt Symptom that diſcovers the Attack; but the Reaſon why I poſtpone a Phthiſis, and treat it as the laſt Stage of a Conſumption, is, becauſe, begin when it will, it is generally a fatal Prognoſis, if the Ulcer is not reliev'd in the very Beginning.

INDEED, while the Lungs are only inflam'd, as in a Peripneumony, or when Tubercles are recently form'd, the Obſtructions may be diſcuſs'd, and the Patient abſolutely cur'd; but once theſe Tubercles turn to Vomica's, or Abſceſſes, and theſe Abſceſſes open in Ulcers, and theſe Ulcers continue for any conſiderable Time, little Hopes remain; though

I cannot come into the Opinion of thoſe Writers, that have determin'd a Phthiſis as that fatal Epocha, or Period of Time, beyond which there is no Redemption, becauſe I have endeavour'd to ſupport the contrary; and in the ſecond Part of this Treatiſe have propos'd Arguments in Defence of the Poſſibility of curing Ulcers in the Lungs.

The Cauſe of a Phthiſis.

WE have obſerv'd already that there muſt be a Diſpoſition to, before there can be a Generation of a Diſeaſe; and this, in fact, holds good as well in Diſeaſes of the Lungs, as of any other Part of the Body. The Texture of the Lungs muſt, therefore be infirmly diſpos'd, before they can be affected; upon which the Juices will move more ſlowly through their fine Veſicles, and depoſite a larger Quantity of Phlegm than a freer Circulation would admit of; for Phlegm, as I have already obſerv'd, is only the fine ſerous Parts of the Blood ſlowly ſecreted, and its greater or leſſer Viſcidity entirely depends upon the Quickneſs or Slowneſs of its Motion, as it comes to the Orifices of the ſecreting Canals; for the Attraction

traction of Fluids of ſimilar Particles is always in Proportion to the Degrees of Motion, the Fluid obtains, and the Number of Complications that go to the Structure of the ſecreting Canal.

THIS viſcid Phlegm coming daily to be ſecreted, and conſiſting of Particles too large to paſs, will entangle in the fine Strainers, and generate Obſtructions, Inflammations of the Lungs, that, if not timely cur'd, will terminate in Tubercles, Vomica's, and Ulcers; and, in fact, we generally obſerve that thoſe incident to frequent Inflammations ſeldom eſcape, ſooner or later, falling into a Phthiſis; that being the fatal Step moſt Diſeaſes of the Lungs lead to; that Preſſure, Weight, and Shortneſs of Breathing that frequently attend phthiſical Perſons in beginning Conſumptions, often ariſe from Tubercles or ſchirrous Tumours, that ſwell and diſtend the Lobes of the Lungs, whereby they over-fill the Cavity of the Cheſt, and are unable to dilate their fine Veſicles for the Reception of the Air in Reſpiration. Thoſe Tubercles, in highly ſcorbutick Bodies, appear

pear like white Whelks, Wheals, or Puſhes, diſpers'd here and there between the fine Membranes of the Lungs, which often ſuppurate, and open in little Abſceſſes, that, in unſound Conſtitutions, diſpoſe to Ulcers; but in Bodies where the Balſam of the Blood remains uncontaminated, digeſt and heal. What I mean by the Balſam of the Blood, I have explain'd in the ninth Chapter of the ſecond Part, where I exhibit the Arguments in Defence of the Poſſibility of curing Ulcers of the Lungs.

WHEN the Phthiſis has for a conſiderable Time continu'd to vex the Patient, that is, when the Ulcer of the Lungs is confirm'd, the Intervals of Eaſe begin more and more to leſſen; and now in theſe laſt Scenes, theſe inſeparable Symptoms of Cough, Pain in the Breaſt, and Expectoration of fætid, green, purulent Matter, are all exaſperated. This Pus or Matter ſpit up, appears not to differ any Thing, in its ſenſible Qualities, from that Quitter that iſſues from a well digeſted Ulcer happening to any other Part.

TOWARDS

TOWARDS the Evening the Hectick Fever greatly increaſes, which abates as the Morning comes on. This Abatement ariſes from the Solids receding from their Stricture, by Reaſon that the Fluids paſs off in profuſe Sweats: As ſoon as theſe profuſe Sweats are fully compleated, the cutaneous Glands, with what little Spring they obtain, in ſuch Circumſtances, reſtore, and the Patient finds himſelf chear'd and reviv'd, which often buoys him up with Hopes of Recovery, when, to a diſcerning Judgment, not the leaſt Symptom of Hope appears; the Fluids again clog the Glands, and charge the Blood with a ſubſequent Load, that renews the Fever, which I have obſerv'd in ſome Conſtitutions to mimick all the Symptoms of a perfect Intermittent, and therefore by ſome is call'd an Intermittent Hectick.

Cauſe of the laſt Symptoms.

THE Patient daily waſting more and more, at length is ſubject to great Anxiety and Uneaſineſs, to frequent Gripings of the Belly, Fluxes, and ſharp pungent Pains of the Sides, which all ariſe

ariſe from a Failure of Motion in the Solids. Laſtly, his Expectoration ſtops, his Spirits faint, his Tongue faulters, his Hands tremble, and his feeble Joints are ſcarce able to ſupport his tottering Carcaſe; ſo that his Fleſh being entirely emaciated, and his Body reduc'd almoſt to a Skelleton, the welcome Meſſenger of Death, is ſo kind as to releaſe him of all his Miſery.

CHAP. XII.

Of the Cauſes of the Symptoms from the Evacuations intended or remitted.

IN the former Chapter, we have clearly accounted for the ſeveral immediate Cauſes of Decays, Waſtes, and Conſumptions, and their ſeveral Degrees following upon theſe Cauſes: In this I ſhall endeavour to account for the different Progreſs of the Diſeaſe, from the Evacuations intend-

ed or remitted; for Conſumptions are to be eſteem'd more or leſs acute, and conſequently more or leſs chronick, according to the quicker or ſlower Progreſs they make; which different Progreſs, in a great Meaſure, depends on the Evacuations being more or leſs irregularly diſcharg'd; and as the immediate Cauſes of Conſumptions ariſe from the Contraction of the Solids depreſs'd beneath the Balance of Nature, and from the Attraction or preternatural Coheſions of the Blood, and other Fluids following upon that Depreſſion, and from Obſtructions, Tubercles, ſchirrous Swellings, ſcrophulous Tumors, and Ulcers, ſettling upon the Habit as the Effects of thoſe Attractions and preternatural Coheſions, and from the Decays and Waſtes of the ſeveral Parts, as the Conſequence of thoſe Obſtructions, Tubercles, ſchirrous Swellings, *&c.* which excite the Fever and other Simptoms; ſo the proximate Cauſe, or that neareſt the immediate, ariſes from the Evacuations preternaturally affected, or their being irregular, whoſe Irregularity we frequently obſerve to intend the Decay and Waſte, and haſten on the Conſumption.

That

THAT the Conſumption is protracted or haſten'd on, in Proportion as the Evacuations are intended or remitted, appears evident from that intenſe Thirſt, ſinking of the Spirits, and Loſs of Strength, that all greatly increaſe with the Diſcharge; for whenever the Subſtraction of Matter from the Conſtitution is larger than the Quantity granted for its Support, that is, whenever the Evacuations are greater than the Quantity taken for ſupplies, there muſt neceſſarily ariſe a Decay: And hence it follows that old Age is nothing but a natural Conſumption, wherein the Quantity expended in carrying on the Actions of Life, is greater than the Quantity taken for Nouriſhment; for in the Progreſs of Age, that is, before he arrives at his full Growth, the Quantity taken muſt either be ſuperior to the Expence, that is, to the Diſcharges made by the Evacuations, or elſe a Decay will unavoidably fall upon the Conſtitution; and tho' we ſee all the membranous Parts of the Body under a ſenſible Decay in Perſons labouring under Conſumptions, yet I very much queſtion whether the Heart ever

The Evacuations the Cauſe of all Decays that can happen to the Conſtitution.

decays, or, at leaſt, in Proportion to the other Parts: The Reaſon that firſt induc'd me to enquire into the Grounds of this important Propoſition, which I ſhall more copiouſly diſcuſs in the next Chapter, was the great Difficulties I met with in endeavouring to account for the ſeveral Symptoms of the Diſcharges, that greatly perplex the Patient in the Progreſs of this Diſeaſe, without admitting that Propoſition as a Data.

Thus far having prov'd in general, that the irregular Diſcharges of the Evacuations are the proximate Cauſe, I ſhall now proceed to conſider how they particularly affect the Body under Decays, Waſtes, and Conſumptions. But before I proceed to diſcover their preternatural Affections, it may ſeem neceſſary, in the firſt Place, that I proceed to account for their regular Diſcharges made from the Body under a ſound State of Health; but as I have diſcharg'd this Point with ſome laudable Exactneſs in my *New Theory of Phyſick and Diſeaſes*, and as I can perceive no Reaſon to alter my Opinion upon what I have there deli-

deliver'd concerning that Subject; ſo I ſhall refer the Reader to that Treatiſe for farther Satisfaction upon thoſe Heads, and only ſlightly take notice of them, as far as they concern my preſent Enquiry.

I KNOW it is an eſtabliſh'd Maxim in Phyſick, that the Decreaſe of any one Evacuation, muſt be ſucceeded by the Increaſe of ſome other, or elſe a Diſeaſe will ariſe; but upon fully reconſidering that Propoſition, and the Reaſons upon which it is grounded, I find it abſolutely impoſſible, in the general, for Nature to invert the Order of any of the Evacuations, ſo as to ſupply, by any one, the Defects of another, without endangering the Conſtitution at the ſame Time; for tho' it may appear, that the intending of the latter, upon the Receſſion of the former, may preſerve the Balance of the Juices even, as to their Quantity, yet the Quality of the Excrements retain'd, upon any of the Evacuations ſuppreſs'd, will be capable of greatly diſturbing the ſeveral Actions of the AnimalOEconomy under ſuch Changes; for what Agreement can we perceive between the Diſ-

charges made by either the Kidneys or cutaneous Emunctories, and the Excrements diſcharg'd by Stool? or how can the one ſupply the Defects of the other? or what Affinity has any of the general Evacuations with the Menſtrual Flux? which I ſcarce ever knew ſuppreſs'd for any conſiderable Time, but it always gave great Uneaſineſs to that Sex, notwithſtanding the Endeavours us'd for ſupplying that Diſcharge by intending ſome other of the Evacuations.

We receive the beſt and ſureſt Indication of Health, from the regular Diſcharge of all the Evacuations: When the Inteſtines anſwer by Stool, the Kidneys and Bladder perform their reſpective Offices without Pain or Difficulty, and Perſpiration ariſes free and unobſtructed.

Now if the regular Being of all the Evacuations be the beſt Indication of Health, then Parity of Reaſon requires that their irregular Diſcharge ſhould be the beſt Indication of Diſeaſes, and the Quality of the Evacuation the beſt Indication of the Quality of the Diſeaſe.

THESE are the three great Out-lets of Nature, which, as they are intended or remitted, haſten on or protract Diſeaſes. The Matter of our Stools, while we are in a ſound State of Health, is, for the moſt Part, the impure Separation of the groſſer Parts of the Chyle along that tortuous Winding Pipe, whoſe Diviſions give Names to the Inteſtines; but this Matter, in a great Meaſure, under Conſumptions is diſcharg'd from the Blood, and ariſes from the Weakneſs of the Inteſtines, and the over-relax'd Tone of the inteſtinal Glands, ſeated moſt numerous in the Colon, whereby they are unable to make Reſiſtance to the Juices coming to thoſe Parts for Secretion, by the ſuperior Force of the Heart. Theſe Glands ſerve alſo for an Out-let to the Blood, when the Veſſels are overcharg'd in high Fevers, or other inflammatory Diſeaſes, eſpecially where Bleeding was not timely adminiſter'd in the Beginning.

The Cauſe of the Diarrhoea.

UPON the ſame Grounds and Principles ariſe very often in Conſumptions a large Diſcharge of Urine. This Flux of

Cauſe of the Flux of Urine.

Urine will clearly appear to be diſcharg'd from the Blood in large Quantities, from the Force of the Heart not decreaſing in a ſimple Proportion to the Force of the renal Glands; for if the ſpringy Fibres, that compoſe the Mechaniſm of thoſe Glands, were not relax'd, and their Orifices or Secreting Ducts too much widen'd, they would be capable of retaining the Fluids, or, at leaſt, of making ſuch a Reſiſtance to their Force, as would prevent a preternatural Secretion, and conſequently any larger Diſcharge of Urine than what the Body could well ſpare.

From the ſame Origin ariſe the Diabetes, a dangerous Symptom, and which proceeds from a higher Perverſion of the Solids: Nor can we conceive any Thing in Nature capable of affecting the Urine with this ſweat Taſte, but the Mixture of the Bile and pancreatick Juice, with which the Chyle is blended in the Duodenum; for the Chyle, before it deſcends out of the Stomach, is perfectly taſteleſs; and once it has paſs'd the Inteſtines, and enter'd the Lacteals, we perceive it to affect the Tongue with thoſe ſacharine

charine Salts it communicates to the Urine in a Diabetes, and which the Solids miniſtering to the Circulation, have not a Power or Strength to overcome.

Cauſe of the clammy Sweats.

THE ſame Laws of Motion that diſpoſe the foregoing Evacuations to be irregular, alſo give a Vent to thoſe profuſe clammy Sweats, that are an inſeparable Attendant on Conſumptions, and which greatly impair the Strength. This Diſcharge therefore will be the leaſt capable naturally of retaining the Juices, becauſe it is fartheſt from the Center of Motion, and conſequently liable firſt to decay; and this is the Reaſon, why many People find themſelves harraſs'd with Night Sweats, that are not ſubject to Conſumptions; yet all profuſe Sweats are Symptoms of great Weakneſs, and give the firſt notice of the Approach of ſome chronick Diſeaſe.

THAT the Glands of the Skin are generally relax'd under Conſumptions, will evidently appear from the Nature of thoſe Medicines we give to curb this Diſcharge when it is greatly intended, which yields not ſo ſoon to any Medicines, as thoſe

thoſe compos'd of the Cortex Peru, whoſe Virtue chiefly conſiſts in that gentle ſtimulating Aſtringency it communicates to the Solids, whereby it contracts the Fibres, braces the Glands, and, in a great Meaſure, reſtores their over-relax'd Tone to their natural Tenſeneſs.

But the Excrements of the ſeveral Digeſtions are not the only Diſcharges that may be irregularly made from the Body, and which depend upon the Reſiſtance of the Heart not decaying in a ſimple Proportion to the Reſiſtance of the other Parts: There are two others, that whenever they appear, indicate the Maturity of Age in both Sexes; and theſe are the Naturalia in both Men and Women.

The Semen is a Balſam, that conſiſts of the fineſt animal Spirits invelop'd in a ſmall Quantity of Phlegm, and which, if over liberally diſcharg'd in Converſation with leud Women, will prove the Bane of the ſtrongeſt Conſtitution; its frequent Emiſſions, in weakly emaciated Bodies, give a very great Lumpiſhneſs, Dulneſs, and Heavineſs to all the Parts, and

and very often reduce the Patient to a confirm'd Conſumption before he is aware of the Conſequence.

Cauſe of the Suppreſſion of the Menſtrual Flux.

SOMETIMES it happens, that the Menſtrual Flux is totally ſuppreſs'd under Conſumptions, which ariſes from a great Cold taken, that deadens the Tone of the Arteries, near the Seat of this Flux; upon which the Blood obſtructs, coagulates, and dams up the Paſſages, whereby they cannot help forward the Diſcharge of this Evacuation; and from this Origin ſpring thoſe ſchirrous Swellings, Cancers, as alſo Dropſies of the Womb, that affect very many Women, that are ſubject to great Weakneſſes, or long Suppreſſions of the Menſes.

THE Sum of all this, is, that the Quantity of the Evacuations diſcharg'd by the ſeveral Drains of Nature, immediately depends upon the Intenſeneſs of the Hectick Fever, the Intenſeneſs of the Hectick Fever on the preternatural Beating of the Heart, the preternatural Beating of the Heart on the Greatneſs of the Plethora, the Greatneſs of the Plethora

thora on the Quantity of Obſtructions, and the Quantity of Obſtructions on the Depreſſion of the Solids beneath their natural Standard; which is the immediate Cauſe of all the chronick Diſorders that any way can affect the Animal OEconomy.

CHAP. XIII.

Arguments demonſtrating that the Reſiſtance of the Heart, in Decays, Waſtes, and Conſumptions, decays not in a ſimple Proportion to the Reſiſtance of the other Parts.

HAving in the former Chapter clearly diſcover'd, that the Evacuations under Decays, Waſtes, and Conſumptions, are intended, and that their Intendment haſten on the Diſeaſe, and exaſperate the Symptoms, I ſhall in this go on to examine the Cauſes of their Intendment, and the

the Reaſonings that make for the Support of theſe Cauſes, and the Grounds on which we have founded theſe Reaſonings.

THIS, indeed, is the moſt clear Way of accounting for the Changes that happen in human Bodies, when from certain Effects, diſcoverable by the Laws of Nature, we argue to their certain Cauſes, till by a Chain of Conſequences, all depending on each other, we arrive at the firſt Spring of all Motion in animal Bodies, which I take to be the Heart, and which I believe, from the following Reaſonings, will appear in Conſumptions not to decay in Proportion to the other Parts, or at leaſt thoſe Parts miniſtring to the Diſcharges.

THIS is a Point, I muſt confeſs, entirely new, and not taken notice of by any Author, antient or modern, who generally aſcribe the Cauſes of Fluxes to vicious ſharp Humours, fermenting in the Bowels: But we ſhall have no Cauſe to call in the Aid of acid ſharp fermenting Humours, to help us in ſolving the Phænomena's of Na-

Nature under Diſeaſes, if we can diſcover a more certain Origin of thoſe Cauſes without them. Beſides, if we admit ſharp fermenting Humours to cauſe Fluxes, we muſt alſo grant them a Share in encreaſing the other Diſcharges, as alſo of producing thoſe preternatural Eruptions, that often happen to the Body, and which no Fermentation of the Juices can be capable of producing: But I believe what I have advanc'd in the tenth Chapter of this Diſcourſe, will invalidate any Thing that can be offer'd in Support of their Exiſtence, eſpecially in Conſumptions; for whoſe Cauſes I am only concern'd in this Treatiſe.

To explain a little more clearly what I mean by the Force of the Heart not decaying in a ſimple Proportion to the Reſiſtance of the other Parts; we are to conſider that the Nouriſhment of all Bodies, under a ſound State of Health, depends entirely upon the Fluids being equally driven into all the Parts, which are endued with a Strength capable of retaining thoſe Juices fitting to be retain'd, and of diſcharging thoſe unfit for Nouriſhment.

ment: This State and Condition of Body, we call the Balance of Nature, or Standard of Health; ſo that under a healthful State of Body, the Solids miniſtering to the ſeveral Diſcharges, by Virtue of their natural Elaſticity, are capable of making Reſiſtance to the ſeveral Fluids coming to theſe Parts for Secretion, from the Impetus of the Heart and Arteries. Now it ſo happens under Decays of the Conſtitution, that this Harmony, between the Force of the Heart and Reſiſtance of the Fibres, miniſtring to the ſeveral Diſcharges, is interrupted and broken; for the Fibres of the ſeveral Diſcharges loſing their Elaſticity or Springineſs, in a Proportion greater than the Fibres of the Heart, are unable to make Reſiſtance to the ſuperior Strength of this Bowel, upon which the Juices run off by the ſeveral Evacuations in greater Quantities than the Body can well bear, without impairing the Conſtitution, and thereby diſpoſing the Body to Decays, Waſtes, and Conſumptions.

WE will venture therefore to aſſert, that the Heart's not decaying in a ſimple Proportion

tion to the other Parts, and eſpecially thoſe Parts miniſtring to the Evacuations, is the ſole Cauſe why the Diſcharges are irregularly intended under Conſumptions, and conſequently that this Proportion is greatly to be regarded in the Practice eſtabliſh'd for the Cure of the Symptoms; and this will clearly diſcover to us, the great Benefits of an attenuating Diet, in order to lower the Heart's Motion, as may be ſeen in the ſecond Part of Chapter IV. as alſo Chapter IX. where I profeſſedly treat of the Poſſibility of curing Ulcers in the Lungs.

To come therefore to the Point in Queſtion, and examine what immediately diſpoſes the Evacuations to be irregular, while the Body labours under Conſumptions; in this Matter we are to conſider that the Solids, deſtin'd by Nature to help forward the natural Diſcharges, are always a good Diſtance from the Center of Heat, and ſome of them have but little Correſpondence with the circulating Fluids, eſpecially thoſe that depend on the firſt Paſſages, *viz.* the Stomach and Inteſtines.

THESE, upon many Occaſions, will be liable to have their Springs impair'd, and, of conſequence, will be leſs able to make Reſiſtance to the Fluids, thither ſent by the ſuperior Force of the Heart; and the Reaſon why the Heart continues to exert a ſuperior Force in Conſumptions, is, becauſe its Fibres impair not in proportion to the other Parts: And this appears ſtill more clearly in the Progreſs of the Diſeaſe, when all the Symptoms are exaſperated, and the Diarrhoea, Flux of Urine, and coliquative Night-Sweats are always, ſome of them at leaſt, greatly intended.

Now were the ſeveral Parts of the Body equally to decay, or decay in equal Proportions then none of the Evacuations could be irregular, but all the Parts being equally ſtrong, all the Parts would equally make Reſiſtance to the Impulſe of the Fluids, and conſequently ſuffer nothing to be diſcharg'd the Body, but what the Conſtitution could well ſpare; which State and Condition, becauſe of the gradual Progreſs of the Decay, could not ſo

Difference between Old Age and a Phthiſis.

properly be call'd a Conſumption, as the Effects of old Age; for the Difference between Old Age and a Conſumption conſiſts in the different Stages they make: Old Age being a natural Conſumption, wherein all the Parts ſo equally decay, as not to come under the Denomination of a Diſeaſe, from the Length of Time it requires in finiſhing its Period.

As all the other Symptoms riſe or fall according as the Evacuations are intended or remitted, ſo the Evacuations entirely depend upon the Heart's ſuperior Strength, and the Weakneſs of the Solids that miniſter to the Diſcharges. If the Glands of the Inteſtines, eſpecially thoſe opening into the Colon, be extremely relax'd, then will any little Force, added to the Heart, increaſe the Diſcharge by the Anus, and this little Force often ariſes from the Aliment we take for Nouriſhment; for we generally perceive, in the Progreſs of Conſumptions, that the Patient is apt to have two or three looſe Stools immediately after he has ſupply'd the Blood with new Chyle; for this new Supply proves an additional Pondus, that ſets

the Heart a going with greater Force, that is, augments its Motion; which greater Force or Motion often detaches the Juices off by the Inteſtines, which conſtitutes the Flux in Conſumptions. And hence ariſes the Cauſe of that Glowing or Redneſs of the Cheeks, thoſe Heats of the Palms of the Hands, and that feveriſh Indiſpoſition that moſt conſumptive People are more or leſs ſure to ſuffer after a full Meal; which Symptoms all abate as the Juices run off by any of the Diſcharges; and do they not evidently appear to run off by ſome of the Diſcharges? becauſe the Heart, the Center of Heat, Motion, and Strength, continues its Vigour and Beating in a Proportion greater than any other Parts of the Body, or, *cæteris paribus*, decays not in proportion to the other Parts, while the Body labours under Conſumptions; and that the Heart decays not in proportion to the other Parts, will appear more clearly from an Examination of its Structure and Mechaniſm.

THE Heart is a ſolitary compound Muſcle, ſheath'd in a Capſule, call'd the Pericardium, and repreſenting a Cone, whoſe

Baſe is obliquely inverted: It is ſupported by four large Veſſels, the Aorta, Vena Cava, Arteria, and Vena Pulmonalis, ſeated in the midſt of the Breaſt, between the Diviſion of the Lungs, fitted with two Auricles and Ventricles for the Reception and Circulation of the Blood through every Fibre of the Body. It receives Veins from the Cava, Arteries from the Aorta, and Nerves from the eight Pair, that diſperſe themſelves through its whole Subſtance.

It is compos'd of Muſcular fleſhy Fibres, that greatly exceed in Strength all other Fibres, that ſerve to the Structure or Mechaniſm of any other Part of the Body. Theſe Fibres lie in different Orders and Arangements, which croſs and interſect each other, as they approach the Baſe or Point, which is that Part of the Heart that lies loweſt. The Baſe receives all or moſt of its Fibres with tendinous Endings, ſeveral of which go not to its Tip or Point, but are reflected back again, and inſerted in the Root of the pulmonary Artery; and this is the Reaſon, why, upon Diſſec-

tions,

tions, we often diſcover the Baſe of the Hearts, in very old Men, oſſified or bony.

THE Heart has two Motions, a Syſtole and Diaſtole; in the former the Blood is pump'd into the Aorta; in the latter it is, by a Dilatation of its Fibres, receiv'd into the left Ventricle, to undergo the ſame Fate at the ſucceeding Syſtole. There are ſeveral Valves, mechanically form'd at the Entrance of both the Ventricles, the Arteria Pulmonalis and Aorta, which let the Blood into theſe ſeveral Cavities, but ſuffer it not to return. The Office of this Organ is to circulate the Blood, by the Mediation of the Veins and Arteries, into every Part of the Body for Nouriſhment, the greateſt of which is the Aorta, where it firſt begins the Circulation, or at leaſt, where it firſt begins to diſcharge it for the Nouriſhment of the Body.

THIS is a ſhort anatomical Epitome of the State and Condition, the Structure and Mechaniſm of the Heart, the Primum-mobile or chief Spring that directs all the

greater Wheels, and under Motions of the whole animal Body.

It was therefore highly neceſſary, that this Bowel ſhould be furniſh'd with Strength greatly ſuperior to any other Part of the Body, becauſe of the ſuperior Reſiſtance it was often to encounter, upon the Suppreſſion of any of the Evacuations, eſpecially an obſtructed Perſpiration, which, as it would infer a Plethora, ſo would that lay a neceſſary Obligation on the Heart to redouble its Motions, till the Body could be clear'd of the ſuperfluous Juices.

Indeed *Rondelitius*, *Hildanus*, and ſeveral others, relate Caſes of its Pericardium or Capſule being found dropſical, and ſometimes ſchirrous; but of any Obſtructions happening to the Heart itſelf, all Authors are ſilent; and indeed, from the abſolute Neceſſity of its great and continual Action, its impoſſible to conceive, how any Diſorders can affect its Subſtance, without, at the ſame Time, putting an End to its Motion, and conſequently the Life of the Animal.

Ha-

HAVING thus far proceeded, I ſhall now go on to demonſtrate the Grounds upon which I have founded this Propoſition, *viz.* That the Heart, in Conſumptions, decays not in proportion to the other Parts. Now when the Structure and Mechaniſm of the Body begin to relax and give into Conſumptions, the Fibres of ſome Parts muſt neceſſarily decay firſt, or elſe there could be no Waſte; and if no Waſte, then of conſequence no Conſumption; for while all the Parts continue equally ſtrong, all the Parts will make equal Reſiſtance to the Cauſes, and conſequently repel the Cauſes; and if the Fibres of ſome Parts muſt neceſſarily decay firſt, in order to produce a Conſumption, then, for Reaſons I have already given, the Fibres of thoſe Parts will neceſſarily decay firſt, that conſtitute the Structure and Mechaniſm of thoſe Organs furtheſt from the Center of Heat; and if the Spring of thoſe Fibres decay firſt that are furtheſt from the Center of Heat, it will neceſſarily follow, that the Spring of thoſe Fibres will decay laſt that are neareſt the Center of Heat, that

Arguments in Defence of the Propoſition.

is, the Center of Motion, and that is the Heart it ſelf.

The Heart, therefore, will be the laſt Organ that decays, or looſes its Strength: The Solids, therefore, that miniſter to the ſeveral Diſcharges made by the natural Evacuations, will be the firſt Parts that diſcover the Decay, and come under the Power of Conſumptions.

The Stools, therefore, will be fluid, not ſoft, liquid, not figur'd, which is the natural Conſiſtence they ought to be, under a ſound State of Health; becauſe this Diſcharge, under Conſumptions, is made immediately from the Blood, and indicates the Force of the Heart to be ſuperior to the Reſiſtance of the Bowels, eſpecially the Inteſtinal Glands. Therefore the Fluids will run off by looſe Stools, or go to the Kidneys, and there ſecrete a Flood of Urine; or aſcend to the cutaneous Emunctories, and there diſcharge themſelves in profuſe melting Sweats.

Now, from the foregoing Arguments and Reaſonings upon this Head, it clearly appears, that the Quantity of Juices going

going off by the ſeveral Evacuations, muſt depend upon the Quantity of Motion and Strength the Heart obtains above any of the other Parts miniſtring to thoſe Diſcharges: And, from theſe Principles, we diſcover the Acuteneſs of the Symptoms, in any given Circumſtances of Bodies labouring under Conſumptions; for the greater or leſſer Acuteneſs of the Symptoms, and conſequently the greater or leſſer Acuteneſs of the Diſeaſe, directly depends upon the greater or leſſer Quantity of the Juices evacuated in any given Time, as they do gain upon the ſuperior Strength of the Heart.

BUT it here may be objected, that we very often perceive Decays to impair the Conſtitution, when no Flux of the Bowels attend, but on the contrary a hard-bound coſtive Belly; which is a ſtrong Argument, that the Inteſtines do not always decay, ſo as to be affected with the Juices that come to them for Secretion, from the Force of the Heart, and, conſequently, that, *cæteris paribus*, in ſuch Circumſtances, the Inteſtines continue equally ſtrong with the Heart, becauſe not capable of being affected by its Impulſe. To

To all which give me leave to anſwer, That it muſt be confeſs'd, that in ſome particular Caſes of beginning Conſumptions, the Stomach and Inteſtines do not give way, as peculiarly in a Tabes Dorſalis, the Reaſon of which I have given in Chap. VIII. where I profeſſedly treat of the Nature and Cauſe of that Diſeaſe; but yet a Flux generally attends a Tabes in its Progreſs, and I ſcarce ever, in all my Practice, obſerv'd one Patient to go off the Stage, under a Conſumption, but what, more or leſs, towards the laſt Stages of the Diſeaſe, a Flux of Juices were obſerv'd to run off by the Inteſtines: And I had ſeveral Reaſons to perſwade me, that this Flux was detach'd from the Blood, and the Diſcharge immediately made by the Inteſtinal Glands, and no ways depending on any ſuppos'd Ferment lodg'd in the Stomach, and firſt Paſſages. And the Manner in which Fluxes are diſcharg'd under Conſumptions, greatly ſtrengthens the Force of theſe Arguments; for the Patient ſeldom labours under a continual Diarrhoea; his Looſeneſs comes and goes by Fits, and his Stools come away generally

rally ſometime after a Glut of new Chyle has been charg'd into the Blood, upon which the Number and Quantity of his Stools often depend; ſometimes they come away ſo ſuddenly, and with that Violence, that they greatly impair his Strength, damp his Spirits, and haſten on the Decay; which Symptoms the Patient perceives greatly to affect him, immediately after the Diſcharge: But nothing confirm'd me ſo much in theſe Sentiments, as thoſe continual Diſcharges, that very often are fluug off this Way towards the Height of great Fevers, which ſometimes prove a favourable Prognoſis to the Patient, labouring under the moſt dangerous Symptoms: All which are generally relieved upon the diſcharging two or three fœtid, dark, fluid Stools, that, both from their Colour and Conſiſtence, ſeem to be caſt off from the circulating Maſs.

I HOPE, by this Time, I have ſaid enough to prove this Point no conjectural Suppoſition of my own, but a Propoſition founded on Principles the moſt certain that can exiſt in the Body. However, it is of the laſt Importance, to have it thoroughly

roughly clear'd up; which I ſhall endeavour to do in the beſt Manner I am able, by endeavouring to account for the moſt dangerous Symptoms from this Origin.

The Symptoms that under Decays denote moſt Danger, are, a melting Diarrhoea, a Flood of Urine, Night-Sweats, Cough, and ſpitting or vomiting Blood: And the immediate Cauſe of all theſe Symptoms ariſe from the Force of the Heart impelling the circulating Fluids to the Inteſtines, renal Glands, cutaneous Emunctories, and bronchial Artery, with an Impulſe ſtronger than theſe ſeveral Parts can make Reſiſtance to, whereby they break out in Hemorrhages, Fluxes, or coliquative Night-Sweats, and carry off, by theſe ſeveral Diſcharges, a Quantity of Juices greater than Nature can well ſpare without defrauding the ſeveral Parts of their juſt and neceſſary Supplies; upon which the Strength impairs, the Spirits waſte, and the whole Body comes ſenſibly under the Power of a Decay: But theſe Diſcharges could not be increaſed to that Degree we often obſerve them in Conſumptions, were not the ſeveral Solids that

that miniſter to theſe Evacutions, or the ſeveral ſpincter Muſcles, that help forward theſe Diſcharges, greatly leſſen'd in their Strength, and conſequently very much impair'd in their Action.

THIS Argument of the Heart's not decaying in proportion to other Parts, is ſtill more ſtrongly ſupported, from the many Inſtances we meet with in Diſſections, where all the Parts have been greatly waſted and emaciated, while the Heart continued whole, tight, and firm in all its Fibres, and little alter'd from its natural Poſition and Make. What gave me ſtill further light into this Affair, was the Diſſection of an old decrepid Fellow, that died of a Complication of Diſtempers, in whom we diſcover'd all the Parts of the Body almoſt rotten. His Stomach, Liver, and Spleen, were all ſtuff'd with ſchirrous Swellings, and the two latter almoſt parboil'd; the right Lobe of his Lungs was affected with glandulous Swellings, here and there diſpers'd through its cellulous Subſtance, and the left almoſt waſted, with a vaſt Quantity of fœtid Puſs

Arguments to ſupport the Arguments in Defence of the Heart's not decaying in Proportion to the other Parts.

Puſs lying in the Trachea. We could diſcover little Omentum or Caul, and the Viſcera, eſpecially the Inteſtines, were all turn'd green from the over-flowing of the Gall; all the other Parts ſuffer'd in Proportion, except the Heart, which under all the foregoing Diſorders remain'd firm and tight, ſave that when we came to examine its inner Subſtance with the Knife, towards the Baſe it appear'd a little more cartilaginous than uſual in younger Subjects. I had an Occaſion ſometime after to improve this Experiment, but ſtill it ſucceeded; and the Caſe of Mr. *Finch* confirm'd me that this Propoſition was grounded upon the cleareſt Proofs.

It grows ſtill ſtronger, by conſidering that if the Heart were to decay in proportion to the other Parts, that is, were all the ſeveral Parts of an animal Body to decay in a ſimple Proportion to each other, then we could diſcover no Symptoms of Decays to invade the Conſtitution; for all the Parts equally decaying, all the Parts would make equal Reſiſtance to the Cauſes, and conſequently no Symptoms would appear

appear in one Part more than another: In this Caſe all the Evacuations would be regular, from the Heart's not ſending the Fluids to the ſeveral Parts miniſtring to the Diſcharges with a Force ſuperior to their Reſiſtance; ſo that under theſe Circumſtances, inſtead of a Decay or Conſumption, it might more properly be called Old Age; ſince Old Age is only a Decay wherein all the Parts equally waſte, as I have already obſerv'd; and a Conſumption is a Decay wherein all the other Parts waſte ſooner than the Heart; ſo that in the former all the Parts equally decay together, which is the Reaſon why very old People generally die ſuddenly, and their Snuff of Life is extinguiſh'd in a Moment, becauſe the Heart, the Center of Motion, equally decaying with the other Parts, is equally incapable any longer of continuing its Motions with the other Parts, upon which a Stop is inſtantly put to all the vital Springs of human Nature.

THIS Argument, of the Hearts not decaying in proportion to the other Parts, grows ſtrongeſt of all, if we conſider, that

that were all the Parts equally to ſuffer under Conſumptions, then all the Parts muſt equally loſe their Motion, their Heat, and conſequently their Life; which is contrary to daily Experience; for they that are converſant with ſick and dying People, know very well that the extream Parts, that is, the Hands, Feet, and their Appendages, the Fingers and Toes, give off from Life firſt in the Agonies of Death, and the Blood's Motion ceaſes next in all thoſe Parts that are furtheſt from the Heart, that great Spring of Motion, whoſe Stop puts an End to all the vital Actions of Life.

All the foregoing Arguments are greatly ſtrengthen'd and confirm'd from what we learn concerning thoſe Ulcers, Fiſtula's, and Iſſues, that often affect the Legs of old People, that, in their younger Years, have freely indulg'd themſelves in a luxurious Way of Living. Theſe old Sores prove a continual Drain to the Conſtitution, and, while they are kept open, prevent any Humours from ſettling upon the Habit: But as the Patient draws nearer to the Verge of Life, ſo in proportion

portion all the Springs of Nature weaken: The Heart beats more faintly, and conſequently the Solids are unable any longer to convey the Juices to the affected Parts for Secretion; whereupon the Ulcer, Iſſue, *&c.* dries up, or, as the Vulgar has it, retreats inwardly upon the Habit, and kills the Patient: But, in fact, the Ulcer dries up, and the Patient dies becauſe the Solids begin to be defective in their Duty, and cannot any longer maintain the Circulation into the ſeveral Parts of the Body.

Now, if the Heart once begins to abate its Action, much more the Solids, dependant on its Action, and moſt of all the Parts miniſtring to the Diſcharge of the Ulcer, becauſe ſuch Ulcers generally being ſeated on a dependant Part, are a good Diſtance from the Impulſe of the Heart.

THIS is ſo eſtabliſhed a Truth, that I believe it will ſcarce be diſputable by any converſant in Practice, or that have been concern'd in Caſes under thoſe Circumſtances; for all Endeavours are uſed to keep the Fiſtula, Iſſue, or old Ulcer

open, there being no Doubt of preſerving the Patient's Life ſo long as we can keep the Ulcer to a good Digeſtion; and the Ulcer will be kept to a good Digeſtion, ſo long as the Heart and Arteries ſhall continue to do their Office, that is, ſo long as they continue to help forward the Secretion of the Juices for the maintaining the Matter of the Diſcharge.

THE Reaſon, therefore, why the Ulcer dries up a little before the Death of the Patient, is, becauſe the Solids, that miniſter to the Diſcharge of Matter made from the Ulcer, loſe their Action, and conſequently the Juices their Motion and Secretion: Upon which the Running of the Ulcer, Fiſtula, *&c.* dries up, which is a fatal Preſage that the Heart itſelf cannot long continue its Motion. This is ſo clear a Way of Reaſoning upon the Nature of the animal Motions, that I cannot, for my Life, forſee what can be fairly objected againſt it.

I MUST confeſs that the Reaſonings and Arguments in ſupport of the foreſaid Propoſition, might have been contracted into a leſſer

leſſer Compaſs; but, as this was a Point of Importance, and a Way of accounting for Fluxes, and the other preternatural Diſcharges, entirely new, ſo I was willing to exhibit it in all its different Views, that the Connexion of the ſeveral Arguments might appear more evident and clear to the Reader.

I DOUBT not but this will meet with the Fate moſt generally attending new Diſcoveries; but, as it is founded upon a Cloſeneſs of Reaſoning, and all the Experiments that can be neceſſary to evidence the abſolute Certainty of any Propoſition, ſo I am in Hopes it will meet with a favourable Reception from the more candid and judicious Part of Mankind: And I queſtion not but that if this Principle were further purſu'd, conſiderable other Truths might be diſcover'd, as well in Acute as Chronick Diſeaſes; which the Laws of Brevity I have ſet myſelf in this Treatiſe, will not ſuffer me to run further Diviſions upon.

CHAP. XIV.

Of the Mechanical Affections of the Non-naturals; and the Manner how they cauſe Decays, Waſtes, and Conſumptions.

HAving throughly conſider'd, in the three laſt Chapters, the immediate and proximate Cauſes, with all their ſeveral Connexions and Dependencies one upon another; as alſo the Arguments in ſupport of the Heart's not decaying in proportion to the other Parts; the Order of my Diſcourſe now requires that I go on and examine into the moſt remote Cauſes, or the Cauſes that diſorder the Heart's Motion, and of conſequence excite its preternatural Beating: Cauſes, without which neither of the other could be put in Action, nor excite any Decay in the Animal OEconomy.

As

As the Nonnaturals, therefore, give the firſt Diſturbance to our Bodies, and are the prime, original Cauſe of all thoſe Diſorders, that any way can affect the Conſtitutions, ſo will it be highly neceſſary that we take Notice how they oblige the Conſtitution to give way to their Impreſſions, in order to produce a Conſumption.

All Diſorders from the Nonnaturals.

WHILE the Motions of the Heart continue to be directed by a regular Impulſe, that is, while the Nonnaturals continue to impreſs their benign Influences upon this Organ, all the Springs and Undermotions of the whole Body will obey its Directions; but whatever, at any Time, perverts the regular Impulſe of the Heart, or any of its Appendages, the Veins and Arteries, That, will, at the ſame Time, pervert the natural Diſcharges, the Beating of the Pulſe, the Motion of the Blood, and, conſequently, the Action of the whole Body: But nothing, in Nature, can do this beſides the Nonnaturals; and therefore to them we muſt refer the firſt Beginnings of all Diſorders, that can any way

affect the Structure and Mechaniſm of theſe ſeveral Parts, that compoſe the Human Body.

The Air varying with the Seaſons, and the Seaſons being only the different Faces the Weather puts on, from the different Degrees of Heat and Cold, ariſing from the different Diſtances of the Sun's Influence, with which it affects our Hemiſphere, and the different Point from whence the Wind comes: It will neceſſarily follow, that a Variation of the Sun's Diſtance will naturally infer a Variation of the Air's Spring, which, at different Times, will not fail differently to affect the natural Motions of our Solids.

Now, as the Sun's different Diſtance and various Turns of the Wind give us theſe different Seaſons of Spring and Autumn, Summer and Winter, with all the Variety of Weather, that differently affect us at thoſe different Times, ſo, I believe, it will be granted, that the Spring, of all other Seaſons, affords the moſt conſiderable Changes, as well to the animal as vegitable Parts of the Creation.

A TIME when our Climate, in particular, is obſerved to receive the greateſt Alterations; a Time when the vivifying Power of the ſolar Rays warms the Glebe, expands the Juices, and excites the Meads, the Groves, and ſilent Woods, to unfold their Glory, cloathing all Nature in a Garb moſt beautiful to behold; then it is the Earth puts on her gayeſt Livery, and beſpangles the Hills and Dales with a Variety of Flowers, that delight our Eyes.

Of the Pleaſures that attend the blooming Spring.

BY the ſame ſacred Influence of this Celeſtial Fire, the ſleeping Serpents creep from their wintry Dens: Inſects revive, and are warm'd into Life, and Beaſts diſrobe their old Liveries, in order to renew the ſame. How comes it, that the winged Tribe ſhould only then unite in Pairs to propogate their Like? What makes the game Cock ſo furiouſly engage his Rival at this, more than at any other Seaſon? And why is all this Inſtinct moſt furious in the Spring? Not only Beaſts and Birds, but Man, the lordly Creature Man, by this exhaling Heat,

this geneal Warmth, is called up to enliven Nature, and produce his Like.

THESE are the pleaſing Scenes that, in the blooming Spring, ſo agreeably affect all our Senſes, that charm the Soul, pleaſe the Sight, and raviſh the Ear, with the ſoft melodious Harmony, that the early Bird gives to the Woods, the Groves, and ſmiling Meads.

FROM this Propenſity and Inclination diffus'd thro' all the animated Creation, we conclude, there is much Philoſophy couch'd under that antiquated Maxim, *Sol & Homo generant Hominem*: For wherever there is much Sun, there is generally much Fruitfulneſs, and thoſe Nations commonly are bleſs'd with moſt of Nature's Stores, that obtain the greateſt Share of its warming Influence. This Scene of Nature, therefore, that ſo agreeably preſents itſelf to our View in the blooming Spring, we ſhall perceive as a Time very unfit to cauſe Decays, Waſtes, and Conſumptions, but rather as a Time moſt proper to cure thoſe Diſeaſes, ſince the ſucceeding Heat greatly helps to reſolve the

the Obſtructions, to brace the Fibres, and reſtore the Conſtitution of the ſeveral weaken'd Parts to their Preſtine Vigour.

INDEED we often, about the latter End of *February*, or Beginning of *March*, perceive a very offenſive Air to croud our Atmoſphere, from thoſe ſulphurous, dampy, foggy Miſts, that ariſe from the Earth, and greatly relax the Air's Spring: Whereupon many People are diſpoſed to Coughs, Colds, and a Defluxion of Rheum upon their Eyes, Noſe, and Pallate: But all thoſe Effects ceaſe as the Air recovers its Spring at the Approach of the Summer Seaſon, when both the Blood and other Juices renew their Motions: It is then the Fluids expand, and the vaſcular Syſtem ſtretches out in all Dimenſions, from the greater Impulſe of the Heart; ſo that Bodies meaſure larger in the advanced Spring, than at any Time of the Year beſides; for as the preceeding Cold contracts the Fibres, ſhrinks up the Solids, and generates Obſtructions, ſo the ſucceeding Warmth of the approaching Spring, obliges the Conſtitution to dilate, unfold, and expand its vaſcular

vaſcular Syſtem, which rarifies the Blood and other Juices. And hence it happens, that moſt Women perceive their monthly Purgations to break out for the firſt Time, at, or near the Spring Seaſon; this being a Time, that moſt favours that Diſcharge, and in which the Body receives the moſt conſiderable Alterations. So far concerning the Alterations and Changes that happen to the Conſtitution from the Spring Seaſon.

I SHALL now examine what Influence the Autumn or Fall of the Leaf will have, in diſpoſing the Body to Conſumptions; a Time, indeed, when our Air is greatly impregnated with moiſt, foggy Miſts, that generally infeſt our Atmoſphere about the latter End of *September*, or Beginning of *October*, and which diſpoſes the Solids to relax, and the Fluids to run into too cloſe Contacts and preternatural Coheſions. And hence ariſes the Cauſe of our autumnal Agues, and the Reaſon why they are ſo much more difficult of Cure, than thoſe that happen in the Spring Seaſon, becauſe the ſucceeding Winter's Cold contracts the Fibres, retards

tards the Motion of the Fluids, and binds up the impacted Matter upon the Parts affected; and this ſtill appears more evident from their being endemical to marſhy or ſwampy Grounds, eſpecially the Hundreds of *Eſſex*; a Place noted for Agues and intermittent Fevers, which ſeldom leave the Patient till they reduce him into Decays, Waſtes, or a Conſumption.

BUT it is not only different Seaſons, and the different Intemperature of the Air at thoſe different Seaſons, that may diſpoſe the Body to Decays, but the different Times alſo of Day and Night, Light and Darkneſs, have a great Influence over the Conſtitution. For the Author of Nature has divided our Time into two Parts, the one active, wherein the Solids are upon the wear; the other paſſive, in which they receive Repairs; but if inſtead of thoſe ſweet Slumbers, to which Nature then kindly invites us, we indulge in late Hours, and ſpend the Night, as we do the Day, in Action, we ſhall diſconcert the Texture of the Solids, and unhinge the Conſtitution, altho' we add nothing thereunto by faſt Living; and

and for this Reaſon Night-Studies are very pernicious, as they too much defraud us of the paſſive Part of our Time, in which we ought to take our Reſt.

BESIDES the Preſſure of the Atmoſphere is conſiderably more relax'd in the Night than in the Day Time, as clearly appears from the Nature of almoſt all Diſeaſes, whoſe Symptoms generally increaſe towards the Evening, and abate as the Morning approaches; which gives me great Reaſon to believe, that both Light and Darkneſs are poſitive Qualities.

THAT Light is a poſitive Quality, nothing can be more certain, from the Degrees of Heat that always attend it, and the Power it has to increaſe the Air's Spring; and, upon the ſame Grounds, I am inclinable to believe, that Darkneſs is more than a bare Privation of Light, for it conſiſts of Particles (whatever they be) that are capable of abating the Air's Spring: And tho' I ſuppos'd, while I was writing my *New Theory of Phyſick*, that Darkneſs was only a Privation of Light, yet, if that Privation or Abſence make

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an Alteration in the atmoſpherical Spring or Texture, that Change muſt neceſſarily ariſe from Particles of a different Nature; for their is no other Way of altering the Subſtance of any Thing, but by altering the Texture of its Accidents or Figures of the Particles that compoſe theſe Accidents, which conſequently will make it a different Thing from what it was.

THIS Aſſertion will appear more ſtrongly ſupported, if I may venture to mention an Expreſſion, that *Moſes* makes uſe of to expreſs that exceeding thick Darkneſs, that affected *Egypt*, while the Children of *Iſrael* were in Bondage under *Pharoah*; *And there was Darkneſs in all the Land of* Egypt, *even Darkneſs that might be felt;* and what that Darkneſs was, more than a greater Preſſure of the Atmoſphere, that more ſtrongly affected the *Egyptians*, from the Interception of all Degrees of Light, I am unable to conceive.

BUT, beſides theſe Alterations of the Air, that ariſe from the changeable Qualities

lities of the Atmoſphere, there is another that proceeds from our too great Niceneſs, in our frequently waſhing our Houſes: It is poſſible by this Means to relax the Spring of the Air to a very conſiderable Degree, and reduce the Atmoſphere within the Compaſs of a Bedchamber, to be affected with the moiſteſt Damps in the drieſt Seaſons; which Difference of the Air, within the Walls of Houſes, from what it is abroad at ſuch Times, muſt prove of very dangerous Conſequence to weakly, valetudinary Conſtitutions; and tho' it may be objected, that good Fires are generally kept in Rooms newly waſh'd, to dry up the Dampineſs of the Boards, yet I can anſwer to the Objection, that Fires will not avail to reſtore the Spring of the Air: Fires can only dry the Boards, by evaporating their Moiſture; and this very Moiſture it is, that, riſing into the Air included within the Atmoſphere of the Room, does the Miſchief; for this Moiſture relaxes the Spring of the Air, and takes off from that Preſſure, that ought to counter-balance the circulating Fluids, whereby the Conſtitution of the Arteries are more violently intended, and the Circulation

culation elevated above its natural Standard: And to this Cauſe I attribute all thoſe Aches and Colds that many complain of, upon lying in a dampy Room, or a dry Room with dampy Air.

THE ſame may be ſaid of lying in dampy Sheets, by which many have loſt their Limbs, and not a few their Lives; and I believe there are ſeveral Inſtances might be given of Deaths enſuing upon too early going into Houſes newly built, notwithſtanding the well airing them with Fires; the Damps ariſing from new Walls over-powering any Benefit that could accrue from Fires; as might be inſtanc'd in the Misfortune of a very good Lady, who lately going into a new-built Houſe, ſicken'd the third Day from a very great Cold ſhe had taken, and died the tenth, occaſion'd, as ſuppos'd, from the Cold ſhe receiv'd through the Dampneſs of the Walls.

LET theſe Circumſtances then convince thoſe of the Danger of wet Rooms and moiſt Walls, whom the former Inſtance cannot convince; for my own Part, I abhor

hor Naſtineſs, yet love my Health better than to expoſe it to the Danger of catching Cold, (the Conſequence of which no Man can know,) for the meer Advantage of being over neatly clean.

To conclude: In a clear Summer's Day, while the Sun is in its brighteſt meridian Splendor, we perceive Men's Spirits mightily chear'd, their Tempers ſerene, and the whole animal Frame exceedingly reviv'd; all which good Appearances of human Nature, are greatly over-caſt upa ſucceeding Gloom.

Thus far I have thought proper only to touch upon the Nature and Properties of the Air, and ſhew at what Seaſons it was moſt liable to affect our Conſtitutions, and how we receive the greateſt Injuries from its Impreſſions. The Properties that conſtitute its Structure and Mechaniſm, and what makes it what it is, and capable of affecting us in ſuch different Manners, are Subjects I have largely treated of in my *New Theory of Phyſick and Diſeaſes.*

BUT the Air is not the only Non-natural that may injure the Conſtitution; we lie equally open to the Aſſaults of our Diet, and the Meat and Drink we take for the Support of Nature, carries a Dart that will wound us to Death, if we indulge to Exceſs. Indeed it cannot be deny'd, but that the Author of Nature has been extremely indulgent to Mankind, in dealing out thoſe Bleſſings, according to what their different Natures, as well as the different Climates wherein they ſojourn'd, might require. Of Meat and Drink.

THE more Eaſtern and Weſtern Parts of the World abound with Plenty of all manner of Vegitables, eſpecially cooling Fruits, of which they have great Variety; and this kind of Aliment is certainly preferable to all others in Climates, where the Sun's over-heating Influence is ſo apt to Inflame the Blood, and harraſs Nature with acute Diſeaſes; for a vegitable Diet is both the eaſieſt of Digeſtion, and requires the leaſt Streſs from the Solids to attenuate, diſſolve, and fit it for the ſeveral Offices of the animal OEconomy. And tho'

the modern Planting of Colonies, in thoſe Parts, has introduc'd a more luxurious Way of Living, yet it's certain that the Natives fed upon little elſe beſides thoſe Herbs, Fruits, and Roots, the Earth ſpontaneouſly yielded them; and had nothing to quench their Thirſt but a Draught of the next River or chryſtal Stream they met. And I am credibly inform'd, that, notwithſtanding their living on this mean Fare, for natural Genius they are not in the leaſt behind the moſt acute People in the European Climates.

I muſt confeſs that in ſeveral of theſe Countries they enjoy a vaſt Plenty of generous Wines; yet doubtleſs they never were intended for their liberal Drinking; for it's evident, that they are ſeldom long liv'd, that, under hot Climates, liberally indulge in drinking ſpirituous Liquors; becauſe the Intemperature of the Air join'd with the heating Influence of the Wines, ſpurs on the Solids too faſt, and haſtens Life to its Period ſooner, than by the Courſe of Nature it would run, if not aſſiſted by this exceſſive Indulgence.

THIS Debauching of the Conſtitution with hard Drinking impairs the Health in all Climates, and is the grand Reaſon why the Women in both the *Indies* generally out-live the Men: So that, in ſeveral Plantations it is no uncommon thing for one Woman ſucceſſively to enjoy the Converſation of five or ſix Husbands; and all this Ravage, on the Mens Side, generally ariſes from their hard Drinking, to which their Women are leſs addicted.

Now, if we take a Survey of the other Parts of the Globe, we ſhall perceive that Nature, or rather the God of Nature, has moſt wiſely ſuited Proviſions, to fence the Conſtitution againſt the Rigours of the Seaſons, oftentimes very inhoſpitable to the Inhabitants; for this Reaſon we are bleſs'd with firmer Conſtitutions, and thoſe generally inform'd with a ſtronger Manner of Diet, than what is to be met with in many of the Eaſtern Countries. Fiſh and Fowl, and all Manner of Fleſh Meats, we enjoy in greater Plenty; and I am credibly inform'd, from Travellers of good Repute, that here in *England*

we have more Parks, and thoſe better ſtock'd with Game, than are to be found in all *Europe* beſides.

Now the Reaſon, why the Scurvy, Conſumption, and other Chronick Diſeaſes are ſo endemical to *England*, and moſt other Northern Countries, is owing in a great Meaſure to our too great Indulgence in the Uſe of Diet, and becauſe, in the Nature of that Diet, we uſe vaſt Quantities of Fleſh Meats, which, being of harder Digeſtion than thoſe of the Vegetable Tribe, ſooner wear out the Action of the Solids, ruin the Conſtitution, and conſequently pave the Way to theſe Diſeaſes, that by our Way of Living, we are moſt inclinable to be affected with. And this is the Reaſon why thoſe, that, by a liberal Indulgence in Fleſh Meats, have brought themſelves into a Conſumption, are very often greatly reliev'd by a ſpare Diet upon Milk and the lighter Vegetables.

Of the Drinks moſt familiar here in *England*.

THE Fluids moſt familiar here in *England* for the Digeſtion of our ſolid Aliments, are Malt Liquors, Wines, and ſometimes

ſometimes Drams; the firſt of which is a viſcid heavy Drink, and greatly ſubject to generate Obſtructions, eſpecially our common brew'd Ale and Beer, us'd here about *London*. Indeed, further in the Country they are much clearer and finer, yet theſe Qualities do not in the leaſt impair their Viſcidities, which are apt to foul the Glands, and greatly embarraſs the Conſtitution with Obſtructions.

THE finer and richer Wines, when uſed as Cordials to cheer the Spirits and enliven Nature, prove the greateſt Bleſſings to the Animal OEconomy; but if we too much indulge in their Uſe, we ſhall quickly find them to hurry the Conſtitution into Decays; for they over-raiſe the Contraction of the Solids, and of conſequence increaſe the Separations and Secretions of the Juices above their natural Standard, which greatly ſpur on the Deſires, excite vitious Inclinations, and enrage the Paſſions; and tho' the Mechaniſm of our Bodies is ſo artfully contriv'd, as not to give way to every Shock it receives from a Debauch, yet if the Doſe be often repeated, it's impoſſible

that the Conſtitution ſhould long ſuſtain the Charge.

The firſt Beginning and Progreſs of Decays from Diet.

THE Solids continually over-charg'd with this gluttenous Exceſs, in Time give Way, whereupon the Fluids run into preternatural Coheſions among themſelves, which affect the ſeveral Parts with Obſtructions, Schirrous Swellings, *&c.* that diſpoſe the Habit either to receive Decays, Waſtes, and Conſumptions, or ſome other Diſeaſe peculiar to the Conſtitution.

To ſum up all, I have ſaid on the Subject of Diet, in a few Words: The Pins and Screws of the Conſtitution have a determin'd Strength given them, whereby they would ſuſtain the Natural Impulſe of the Solids and Fluids to a conſiderable Time, were they not impeded in their Progreſs by ſeveral Lets, that greatly incommode their Actions; among all which none gives them thoſe conſiderable Shocks they receive from the Aliment we take for carrying on the Laws of Nutrition.

THE

THE Natives of moſt Nations can well enough encounter the Inclemencies of the Air, and whatever elſe ſhall affect them from that Quarter, while they are regular and ſparing in their Diet; but once they indulge to Extreams, they then find Life manifeſtly to ſhorten, and ſo much the more, if that Exceſs be on a Diet greatly luxurious; for all high-ſeaſon'd Meats, poignant Sauces, and rich Wines, increaſe the Separation and Secretion of the Fluids, and conſequently enrage the Paſſions, which in Time muſt weaken the Tone and Texture of the Solids, and greatly impair the Conſtitution.

AND this is the Fate of Thouſands, that debauch themſelves with faſt Living, 'till they reduce the Carcaſs to a perfect Skelleton, before they have liv'd out half that Age they reaſonably might have expected, according to the Courſe of Nature, if they had not too much indulg'd their irregular Paſſions.

THEY act, therefore, very unreaſonably, that pamper young Children with poig-

nant Sauces, rich Wines, and all manner of delicious Viands, whereby they unravel their Veſſels, and become Men and Women before their Times; and all the Satisfaction the fond Parent enjoys, is to ſee the little Creature dance the Imagination in brisk Repartees, and falſe Wit, above thoſe of its Age. Theſe little Pigmies, generally like Muſhrooms, ſhoot out in the Night, and are gone the next Morning: They ſeldom arrive to a mature, never to an old Age; for theſe Bodies of ours are in a continual Flux and Reflux, and we gain the Achme of Strength, and arrive at Manhood ſooner or later, according as we more or leſs indulge in a luxurious Manner of Living, and of conſequence decline accordingly.

Of Exerciſe and Reſt.

Exercise and Reſt are the next of the Non-naturals whoſe Influence I ſhall take notice of; but as the latter is only concern'd in generating Conſumptions, ſo I ſhall content my ſelf with explaining the Nature and Manner how a lazy indolent Life diſpoſes the Body to this Diſeaſe.

The

THE Body of Man is a moſt curious Piece of Mechaniſm contriv'd with infinite Art, and fitted with proper Powers, for attaining the ſeveral Actions of Life. Nothing is more neceſſary to preſerve thoſe Powers, under a juſt and regular Balance, than a foreign Motion ſuperadded to thoſe natural Motions, that reſult from the Mechanical Affections of the Solids and Fluids; for we perceive, by conſtant Experience, that the attracting Principle of the Blood is an Overmatch for the Force of the Solids, unaſſiſted by Exerciſe, as may be too frequently obſerv'd, in thoſe that live a ſedentary Life, whoſe Solids begin to grow effete and languid, and are then incapable of ſending the Fluids to the extreme Parts of the Body, with that vigorous Impulſe obſervable in Conſtitutions more enur'd to this Habitude.

THE Reaſon, why all Matter that compoſe artificial Engines is the worſe for wear, while the Human Machine receives Advantage from Exerciſe, is, that an internal Principle of Reparation is lodg'd in the Conſtitution of the latter;

and this internal Principle is dependent upon Motion, both natural and acquir'd, for the natural Actions of the Solids, would not be able long to ſupport the Motions of the Fluids, unaſſiſted by this principle of Exerciſe, againſt the natural Bent of their Attractions.

BUT how the Solids come to want the Aſſiſtance of extrinſical Motions, I muſt confeſs is above my Philoſophy to determine, unleſs their Force was conſiderably leſſen'd after the Fall, by a Change in the Poſition of the Elements; God Almighty reſolving to make good that Sentence he pronounc'd againſt diſobedient Man, that in the Sweat of his Face, he ſhould eat his Bread. And indeed this ſeems an evident Conſequence of that Curſe, for they that will not labour, that is, exerciſe, ſeldom have an Appetite to eat, or at leaſt a true Reliſh of the Meats and Drinks they take for the Support of Nature.

THUS it appears from Experience grounded upon the moſt evident Principles, that a ſedentary, lazy unactive Life, will diſpoſe the Springs of the Veſſels to relax;

relax; whereupon the Particles of the Juices will run into too close Contacts among themselves, and not afford a sufficient Quantity for the Nourishment of the Body. And hence arise those Obstructions, and that Viscosity or Viscidity of the Juices, that affect the several Viscera, which is the Reason why Ladies of a delicate, nice, and curious Texture of Body, are so liable to Vapours, and other Disorders of the Nerves, that generally pave the way to Decays, Wastes, and Consumptions.

Of the Passions.

THE Passions, of all the Non-naturals give the most surprizing Turns to the Animal OEconomy; and as their Influence has a great Dependance upon our Manner of Living, so I thought it most adviseable to treat of their Natures and Effects after we had finish'd our Thoughts upon the rest of the Non-naturals.

IF we accurately survey the Passions, we shall find them nothing but eager Desires intended from a Weakness of the rational Faculties, for most Persons of shallow Understandings, are generally enduedwith the strongest Passions; and in such Cases the

the Paſſions ſupply the Place of Reaſoning, the proper Province of the intellectual Faculties.

Now the Paſſions being only Deſires, that ought to be regulated, as Reaſon, their ſovereign Judge, ſhall direct, it will naturally follow, that when ever we ſuffer our ſelves, upon any of their irregular Sallies, to be diverted from a reaſonable end, we then pervert the Order of Nature, and from rational Creatures, endowed with thoſe noble Powers, deſcend to the State and Condition of irrational Brutes.

If we enquire what it is that immediately directs us in all the irregular Actions of Life, we ſhall find it nothing but the Paſſions too much intended; as for Example, What is it excites us to overcharge the Body with Gluttony? Nothing but a Paſſion for Appetite. What ſpurs us on to Lewdneſs, and all other Debauchery? Nothing but a Paſſion for Luſt. What makes us covetous? A Paſſion for Money. And if we go on, we ſhall clearly perceive, that all the irregular Actions of Life are owing to thoſe Paſſions: They move us to Ambition,

bition, to Pride, to a Contempt of others; and when they fail of their Ends, they recoil upon the Soul, and form theſe Paſſions of the Left Hand, ſuch as Diſappointments, Cares, Dejectedneſs, Deſpair, Envy, Malice, and Revenge.

ANGER ariſes from diſobliging Actions, which excite the wrathful and turbulant Paſſions, and when inordinate, may well be call'd a ſhort Madneſs. This Paſſion of Anger often drives us on to Extremes, and puſhes us upon Actions the moſt fatal in their Conſequence. How often may we obſerve Perſons ſo vehemently agitated at ſome Miſcarriage, that, for the preſent, they have both loſt the Uſe of Reaſon and Speech, nay, in extream Rarefactions, upon ſudden Checks, and where the Matter hath been of mighty Importance, they have ſo diſconcerted the fine Fibres of the Brain, that an everlaſting Stop has been put to all the Springs of Nature.

BUT as the Paſſions may be badly perverted, and incline us to evil Purpoſes, ſo, by a Turn of the Inclination, may they be intended to ſupport the braveſt Actions.

ons. By them, that is the benevolent Paſſions, we are excited to explore hidden Myſteries, and dive into the untroden Paths and ſecret Springs of Nature, to improve uſeful Arts and Sciences, for the benefit of Mankind, and, in a Word, to poliſh Human Nature.

But beſides theſe Paſſions that indicate the good or evil Intentions of Mankind, there are others, that directly depend upon the Conſtitution or Sex. Some Ladies are of that fine and delicate Turn of Conſtitution, that any Diſappointment extraordinary ſhall overturn all their Happineſs of Life, prey upon the Spirits, and conſume the Habit without any Poſſibility of Redreſs. Many Women, upon the Death of a tender Husband, dearly-lov'd Infant, or much-valued Friend, ſhall refuſe all the Comforts, Solace, and Satisfactions of Life, and, in the midſt of Plenty, pine, ſicken and die. Hiſtory is full of the melancholy Scenes of both Sexes, that, upon any great Loſs, ſudden Surprize, or extreme Diſappointments, have been obſtinately bent upon Death; they would not ſuffer their Eyes to ſleep,

nor their Eye-lids to take the leaſt Slumber.

THESE Paſſions greatly prey upon the Spirits, enervate the Conſtitution, and, of conſequence, eaſily diſpoſe the Body to Decays, Waſtes, and the Pining Conſumption.

CHAP. XV.

Of the Prognoſticks taken from the different Degrees, as well as the ſeveral Kinds of Conſumptions.

IN the former Chapters I have been prolix enough, in giving the ſeveral Inſtructions neceſſary for knowing the Nature of the Diſeaſe, the Parts affected, the ſeveral Cauſes, and diagnoſtick Characters, that ſucceſſively ariſe in its Progreſs; which now leads me to treat of the Prognoſticks, or that Part of Phyſick that teaches

teaches us to determine the Event of the Diſeaſe, from the given Circumſtances of the Patient.

In this Particular, was *Hypocrates* Chief of all the Phyſicians that either preceeded, were co-temporary, or followed him; and as old *Homer* makes all his killing Heroes, always kill, in a killing Place, ſo this divine old Man never delivers a Prognoſis of Death, but the ſame Symptoms, in the ſame given Circumſtances, always prove mortal to the Patient; for which Reaſon I believe his Prognoſticks will continue the Standard of Phyſick in this Particular, as long as the Art it ſelf ſhall ſurvive.

And I will be bold to ſay, that no Part of Phyſick is of greater Conſequence, and better deſerves to be inculcated to young Beginners, than a right Underſtanding of this I am treating of; for it implies a thorough Knowledge of all the Cauſes, Degrees, and ſeveral Symptoms of the Diſeaſe; without which it's impoſſible he ever can make a certain Prognoſis: For how is it poſſible he ſhould determine aright

aright the Events of Diſeaſes, if he underſtands not their Natures and Cauſes; and how can he underſtand their Natures and Cauſes, if he apprehends not the Grounds and Principles upon which they ſubſiſt? and how can he apprehend the Grounds and Principles upon which they ſubſiſt, if he be not thoroughly acquainted with the Structure and Mechaniſm of the ſeveral Parts? Which are Subjects only to be learned from Anatomy, and the frequent Diſſections of Bodies.

His Ignorance of this Point, therefore, will greatly expoſe him to the Cenſure of his Patient or Friends, who, in moſt Caſes, that bear any dangerous Aſpect, are very deſirous of knowing the Phyſician's Sentiments; and therefore will often be put upon asking the following Queſtions. Good Doctor, what think you of his Caſe? Is there any Hopes of his Recovery? Do not flatter us, dear Sir, but let us know ſincerely your Opinion concerning the Iſſue of his Diſeaſe.

Of judging of the Events of the Diſeaſe from the Parts affected.

Now, for a Phyſician to act conſiſtently with his Character, and determine rightly

ly concerning the ſeveral Prognoſticks to be made in Conſumptions; it will be highly neceſſary, before he gives the Reſult of his Judgment, that he carefully examine the Nature of the Diſeaſe, the Parts affected, and the Progreſs it has made upon the Conſtitution.

As to what concerns the Nature of the Decay, that will entirely be apprehended from the Force of the Symptoms, which at the ſame Time will diſcover to us the Intenſeneſs of the Diſeaſe. The Intenſeneſs of the Diſeaſe being given, the Prognoſticks will follow from the greater or leſſer Impreſſions it has made upon the Conſtitution; and the Length of Time theſe Breaches have been a-forming: For all Decays, the longer their Continuance, the greater their Danger; and this holds good not only in Conſumptions, but all other Chronick Diſeaſes, that any way can affect the Conſtitution.

The Parts affected are the next Point that come under our Conſideration; and they moſt certainly may be diſcover'd from

from the Animal Actions of any Part impair'd, which indicate a Load upon that Organ greater than it can disburthen; for it's impoſſible any Organ can be indiſpos'd without being affected from ſome Influence, or other; and when we conſider the Dignity of the Organs that ſuffer, we ſhall eaſily be directed to a ſure Prognoſis: For few, I think, need be told, that a noiſome Spitting, attended with a violent hollow Cough, a ſenſible Waſte of the membranous muſcular Parts, join'd with a Hectick Fever, are dangerous Symptoms; all muſt conclude that theſe are fatal Indications, and plainly diſcover an Ulcer either form'd in the Stomach, or Lungs of ſome conſiderable Standing; and once the Phyſician perceives the Patient thus affected, nothing remains but that he directly make a fatal Prognoſis. Indeed Ulcers ſeated upon any of the principal Bowels, fail not in Time to prove mortal: This I have obſerv'd of Ulcers in the Bladder, Liver, and Spleen, which, if of long Continuance, generally undergo the ſame Fate.

In general, ſlow Chronick Decays are eaſier of Cure, than thoſe attended with more acute Symptoms; and thoſe Decays are found by Experience to be difficult of Cure, that through Negligence are permitted to faſten on the Conſtitution. Of all Conſumptions, thoſe are the moſt dangerous that are attended with Ulcers; and of all Conſumptions attended with Ulcers, theſe are the moſt fatal that affect the Lungs, and ſcarce ever do they admit of a Cure, once the Patient is ſubject to a foul Expectoration.

Consumptions that ariſe from any of the Evacuations ſuppreſs'd are much eaſier of Cure, than thoſe that proceed from their overlarge Diſcharges. Indeed the grand Secret of relieving all curable Conſumptions very much depends upon the Phyſicians being call'd in Time; for generally his Aſſiſtance is implor'd in vain, when through long Delays the Diſeaſe is become inveterate.

All Swellings of the Legs are to be ſuſpected, eſpecially if towards the Even-

ing

ing they ſuffer from Impreſſions made with the Finger, and the Pit remains after the Force is taken off: For this Symptom certainly indicates great Weakneſs; and that the Conſtitution is about to fall into Decays.

OF all Conſumptions, theſe moſt commonly prove mortal, that come upon Pleuriſies, Peripneumonies, inflammatory or nervous Diſeaſes; and theſe that follow upon the ſmall Pox generally undergo the ſame Fate.

LET the Conſtitution be never ſo weakly reduc'd, yet if no Ulcer inwardly affect the Bowels, the Cure may be attempted with Succeſs; eſpecially if the Patient is reſolv'd to be regular in his Diet, and the reſt of the Non-naturals. It portends great Danger, if the other Symptoms increaſe upon the Receſſion of the Night Sweats; becauſe one Symptom, in this Caſe, only gives Way to the Preſſure of another; and worſer ſtill is to be expected, if one Evacuation is intended upon the Remiſſion of another; for I have often obſerv'd that upon the

Suppreſſion of a Belly Flux, the colliquative Sweats, the Hectick Fever, and all the other Train of misboding Symptoms have increas'd to the very great Damage of the Patient.

I come now to conſider the Prognoſticks taken from the Breaches made in the Conſtitution, and the Cauſes that occaſion'd thoſe Breaches; for without doubt we may gather much Light from a thorough Knowledge of the Cauſes, that produc'd the Diſeaſe. Some Decays are Hereditary, and the Children ſo born are weakly diſpoſed from their Infancy; ſome again are contracted in Time: Now if contracted in Time, they muſt ariſe from an Abuſe of the Non-naturals; and I believe all the Non-naturals taken together, have not brought thoſe Ravages on the Conſtitution, that generally ariſe from exceſſive Eating, Drinking, and Wenching; the three grand Springs on which moſt Chronick Diſeaſes turn.

I have ſometimes reſolv'd the Cauſe of this Diſeaſe, and yet the Symptoms would not totally retreat; as ſome Time ago

ago was the Caſe of a Lady in a Conſumption, from a Suppreſſion of her Naturalia; all ſhe ſpit was of a putred, green Colour, of a fœtid, noiſome Smell, and in great Quantities: I reſolv'd the Paſſages, and gave a Vent to the Menſtrual Flux, but could not reſtore the Lungs, nor oblige that noiſome Matter ſhe expectorated entirely to retreat, but more or leſs it would diſcover it ſelf.

LET the Conſtitution be never ſo weakly diſpos'd, yet if the Structure of the Stomach, Lungs, and Inteſtines, continue but ſound, the Decays of Nature may be reſtor'd: If under a Decay, the Urine loſe its natural Taſte, after it has continued its due Time in the Body; it is a ſtrong Preſage that all the Digeſtions are perplex'd and receeding from their former Conſtitution, I ſay, continu'd its due Time in the Body; for I deny not, but that your great Punch Drinkers diſcharge their Urine little alter'd from what it was when firſt taken.

WASTES and Decays that proceed from Gleets not Venereal are very dangerous, tho'

tho' ſeldom mortal, if the Patient will but be regular under a proper management of Phyſick and Diet. Exceſſive ſeminal Evacuations, if frequent, are a dangerous Symptom; as alſo are exceſſive Diſcharges of the Whites in Women, for in both they debilitate Nature, enervate the Conſtitution, and diſpoſe the Body to a Tabes.

Obstinate Obſtructions of the Menſes indicate threatning Symptoms, tho' there is leſs Danger to be apprehended from their total Suppreſſion, than from an overlarge Diſcharge.

In all Decays, a coſtive Body is preferable to a looſe one, ſo it be not ſubject to too great Reſtrictions; for the latter is liable to haſten on the Decay, and drain the muſcular membranous Parts of all their Juices, while the former retards its Progreſs; yet in ſome Caſes, I have obſerv'd the cutaneous Emunctories ſo intended under a coſtive Body, that there was no way of relieving the Patient, but by making a Diſcharge upon the Bowels.

Lastly,

LASTLY, When Weakneſſes of the Joints, Swellings of the Legs, Tremours of the Hands aud Feet, with a univerſal Decay of Strength and Appetite, invade the Patient labouring under an Ulcer of the Lungs, it is Time he withdraw his Hopes from this World; for thoſe Symptoms moſt certainly prognoſticate Death near at hand, and that no more remains, but that the Phyſician palliate the Symptoms, and give the Patient what Eaſe he can under the preſſure of his Dolors, which, under theſe Circumſtances, at the longeſt, cannot be very long.

UPON the whole I cannot perceive any Reaſon to determine a Conſumption more difficult of Cure than any other chronick Diſeaſe, if taken in the Beginning; but the Misfortune is, that this Diſeaſe is very often permitted to make too large Breaches, before Advice is demanded: This of all others being the moſt flattering Diſeaſe that can affect the Conſtitution, and for that Reaſon often buoys up the Patient with Hopes of Recovery, when not

not the leaſt Symptom indicate any ſuch Thing.

THUS I have trac'd out the Natures, Cauſes, and Effects of Decays, Waſtes, and Conſumptions, with all their concurring Circumſtances, from a Chain of Reaſonings, and neceſſary Conſequences depending on each other, in a natural and eaſy Connection, and all ariſing from evident and undoubted Principles.

The End of PART I.





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A NEW METHOD

Of Treating *Decays, Waſtes* and *Conſumptions.*

PART II.

CHAP. I.

The Introduction *to the Cure.*



I Have now finiſh'd the ſeveral Parts of this Diſcourſe, as far as they relate to the Nature of the Diſeaſe, the Parts affected, ſeveral Cauſes, and Effects of Decays, Waſtes and Conſumptions; which now leads me to treat of their Cure, and the beſt way

to relieve the Body labouring under the Preſſure of thoſe Affections.

ALL the Succeſs we can reaſonably expect in Practice, entirely depends upon the Juſtneſs and Verity of our Theory; and if the Principles, on which that is founded, be evident and clear, the Deductions will be natural, and the Conſequences ſupport the Phyſician in his Applications; and direct him in forming the moſt certain Rules and Indications, in order to aſcertain a ſucceſsful Cure.

IN the former Part, we clearly diſcover'd, that there is not the leaſt ſharp, acid Lymph that any way can vitiate the Motion of the Solids and Fluids, while the Body labours under Conſumptions; we have alſo endeavour'd to Demonſtrate, upon the moſt evident and genuine Principles, and ſuch as all Philoſophers admit in ſolving the various Scenes of Nature; that all the Symptoms of Decays and Waſtes, ariſe from the Motion of the Solids, depreſs'd beneath their natural Standard, and from the præternatural Attractions and Coheſions

of

of the Fluids following upon that Depreſſion, and from Obſtructions, Tubercles, and Schirrous Swellings, in Conſequence of theſe Præternatural Coheſions and Attractions; and from a Hectic Fever, Fluxes, and Night-Sweats, ariſing upon the Conſtitution of the Habit, as the Reſult of thoſe Obſtructions, Tubercles and Schirrous Swellings; for it's impoſſible for the Wit of Man to conceive, how any Organ can be indiſpoſed without Obſtructions; or how Obſtructions can form themſelves upon any Part, without the Fibres of that Part relax and give off from their natural Spring and Tenſity: If this, then, be the Manner in which Decays form themſelves, it will eaſily appear, what Methods will be moſt proper, in order to relieve the Body of its Preſſure.

THE particular Indications of Cure will, therefore, moſt ſucceſsfully be attempted from Medicines that evacuate the firſt Paſſages; that diſingage the Obſtructions, brace and reſtore the Texture of the Solids, and invigorate the whole Frame of the Animal Conſtitution. Indeed, I may not

deny, but that relieving of the Symptoms, requires a vaſtly different Treatment from the Cure of the Diſeaſe; and even among the Symptoms themſelves, a Difference is to be obſerv'd; for ſome require the moſt ſoftening, relaxing Medicines, as all great Pains, wherein there is a Stricture upon the Fibres; others are beſt reliev'd by Anodynes, as the Cough and Hoarſeneſs; and there are ſome that will admit of no Palliation without Aſtringents, as the Fluxes.

In order to accompliſh theſe great Ends, I am reſolv'd to keep cloſe to the Subject in Hand, and proportion the Cure, as near as poſſibly I can, to the ſeveral Degrees of the Diſeaſe, and Nature of the Symptoms that attend it; in which Proceeding, I will endeavour to calculate the given Force neceſſary to be employ'd, in order to overcome the Reſiſtance the Obſtructions will make to their Diſengagement; and as there are ſeveral Symptoms that increaſe the Diſcharges, and haſten on the Decays; ſo I ſhall take particular Care to make thoſe eaſy that are moſt diſturbing to the Patient, before I go on to cure the Diſeaſe.

That

THAT Propoſition, concerning the Heart's not decaying in Proportion to the other Parts, and the Arguments and Obſervations in its Defence, took me up more Time and Labour, than all the other Parts of this Treatiſe beſides; for, tho' I was ſenſible, that the Blood often, as well in Health as under Diſeaſes, was diſcharg'd from the Circulating Maſs by the Inteſtines; yet the particular Force employ'd in that Diſcharge, had not been taken Notice of by any Author I know, either Ancient or Modern; and, which is of mighty Importance, not only in the Cure of the Hectic Fever, but alſo in ſupporting the Arguments in Defence of the Poſſibility of curing Ulcers in the Lungs, as will appear from ſeveral corroborating Circumſtances in the following Parts of this Treatiſe.

IN writing this Diſcourſe, I have admitted of no Principles, in Solving the ſeveral Symptoms, Cauſes and Effects of Conſumptions; but what are the genuine Offspring of Nature itſelf, and what ſhe conſtantly uſes in all her Operations; Theſe

I have laid down in a ſummary Manner, as the Baſis of my *New Theory of Phyſick and Diſeaſes*, to which I refer thoſe Readers that are deſirous of further Satisfaction upon theſe Subjects.

AFTER I had publiſh'd my late Treatiſe upon Diſeaſes, ſome Gentlemen were pleas'd to aver, that tho' I had made ſome conſiderable Advances, in order to aſcertain the Theory of Diſeaſes; yet very little was done in Relation to the Practice, but what had been publiſh'd before upon the ſame Subjects. Now, upon reviewing that Treatiſe, I find the Theory and Practice ſo equally correſponding with each other, in all their ſeveral Branches, that I cannot, for my Life, conceive what can fairly be objected againſt the Principles of the one; but what muſt, by neceſſary Conſequence, greatly affect the Foundation of the other.

INDEED I ſhall not deny, but that ſeveral Things in the Practical Parts are more crudely put together than ought to have been in a Matter of that Importance. But had thoſe Gentlemen conſider'd the Great-

Greatneſs of the Task, the Variety of Matter there treated of, and the inſurmountable Difficulties I was oblig'd to encounter, in making every Symptom of Health and Diſeaſes bend to the Mechanical Affections of Matter and Motion; they would eaſily have paſs'd over ſlight Defects; and not have caſt out ſuch ungenerous Reflections, as have been induſtriouſly ſpread againſt me.

THE Difficulty of writing Syſtems in any Art or Science, ought to be carefully weigh'd and conſider'd by thoſe, that aſſume to themſelves the Authority of Judges; and they ought to produce to the World ſome Pieces of their own, on the ſame Subject, more Valuable and Unexceptionable, before they take upon themſelves to cenſure the Defects of others; They only having a Right to cenſure, that have a Right to judge; and they only have a Right to judge, that atteſt their Qualifications, according to the foregoing Standard.

INDEED, to avoid any Cenſure that might enſue for Defects, in either the

Theory or Practice; I had, aforehand, declared in the Preface to that very Book, That I did not publiſh it as a finiſh'd Piece; but only as an Eſſay or Attempt towards reducing Phyſick to a Standard; by erecting the Foundation upon the ſame Principles, that aſſiſt in carrying on the great Round of Nature, and to which, I believe, all the Phænomena's attending human Bodies, whether they relate to Health or Diſeaſes, are referable.

TRUTH is the great End, at which, I believe, we all Aim, in our Enquiries. This Habitude conſtantly continues the ſame, and tho' the Ways to Error may be infinitely varied; yet Truth admits of no Change; but is the ſame, Yeſterday, to Day, and for Ever.

THE only way, therefore, to diſcover Truth, is to lay down Propoſitions, of whoſe abſolute Certainty, there can be no doubt; and from them infer others, equally as certain; and as I grounded the Cauſes of Decays, Waſtes and Conſumptions, on a Chain of Self-evident Propoſitions, as the Baſis

Baſis of the foregoing Theory; ſo I ſhall obſerve the ſame Method, and exhibit to the Reader's View, a Chain of general Indications, founded on the ſame Principles, as a preliminary Introduction to the Cure of Conſumptions.

PROPOSITIONS *demonſtrating the Cure of Decays, Waſtes and Conſumptions.*

PROP. I.

THE beſt Way to reſtore the Conſtitution, labouring under Decays; that is, to Cure a Conſumption; is, in the firſt Place, to endeavour to bring it into a Condition of being nouriſh'd.

PROP. II.

THE Conſtitution will beſt and ſooneſt be brought into a Condition of being Nouriſh'd, by thoſe Means, that moſt effectually relieve the Symptoms of the Diſcharges made by the Evacuations in Conſumptions.

PROP.

PROP. III.

THE Symptoms of the Diſcharges made by the Evacuations in Conſumptions, will moſt ſucceſsfully be relieved by thoſe Means that ſooneſt leſſen the Heart's Motion, remove the Plethora, and reſtore a Freedom to the Circulation.

PROP. IV.

THE leſſening the Heart's Motion, removing the Plethora, and giving a Freedom to the Circulation, will, moſt properly, be attempted by thoſe Methods, that ſooneſt leſſen the Viſcidities and Coheſions of the ſeveral compounding Particles of the Blood.

PROP. V.

THE Viſcidities and Coheſions of the ſeveral compounding Particles of the Blood, will moſt fitly be leſſen'd by thoſe Means that are propereſt to increaſe the Sepa-

Separations and Secretions of the ſeveral Fluids.

PROP. VI.

THE Separation and Secretion of the ſeveral Fluids, will, moſt properly, be anſwer'd by thoſe Methods, that ſooneſt reſolve the Obſtructions of the ſeveral affected Viſcera.

PROP. VII.

THE Obſtructions of the ſeveral affected Viſcera, will beſt and ſooneſt be reſolv'd by thoſe Principles, that increaſe the *Momentum* of the Blood, and bring it to the Teſt of the obſtructed Secretory Strainers with a greater Impetus.

PROP. VIII.

THOSE Principles will moſt effectually increaſe the *Momentum* of the Blood, and oſteneſt bring it to the Teſt of the obſtructed Secretory Strainers with a greater Impetus, that aſſiſt the Solids with a proper

proper Stimulus, that may reſtore their Contractile Powers.

PROP. IX.

THE Contractile Powers of the Solids will moſt ſucceſsfully be reſtor'd by thoſe Methods that beſt and ſooneſt increaſe their Machinulæ or attracting Powers.

PROP. X.

THE Machinulæ or Attracting Powers of the Solids, will moſt properly be reſtor'd by thoſe Methods, that lay the leaſt Streſs upon their Mechaniſm.

PROP. XI.

THOSE Methods lay the leaſt Streſs upon the Mechaniſm of the Solids, and add a Stimulus to the Fibres, that conſiſt of Medicines that bear leaſt upon the Digeſtions, and that are Impregnated with a determin'd Quantity of Chalybeat Preparations.

PROP.

PROP. XII.

THE Contractile Powers of the Solids being once reſtor'd to their proper Freedom and Vigour; they will go on to reſolve the Obſtructions, to deſtroy the Viſcidities of the Blood and other Juices, to diſſolve the Schirrous Tumors, Tubercles and Swellings, lodg'd in any of the Viſcera, and, of conſequence, to reſtore the Conſtitution to the higheſt Degree of Health it is capable of enjoying.

COROL. I.

HENCE a right, regulated Courſe of the Non-naturals, *viz.* a light, thin, clear Air, not too ſharp; a Diet eaſily digeſtible, proper Exerciſe, and a Command of the Paſſions, are the firſt Diſpoſitions, in order to relieve the Symptoms.

COROL.

COROL. II.

HENCE thoſe Medicines that are ſoftening, pliable, and, in ſome meaſure, gently Aſtringent, are moſt fitly adapted, in order to brace the Solids, that miniſter to the Diſcharges.

COROL. III.

HENCE the ſecond Intention, or Cure of the Diſeaſe is to be attempted by thoſe Medicines that reſolve the Obſtructions of the ſeveral affected Viſcera, relieve the Plethora, lower the Heart's Motion, and reſtore the Solids to their priſtine Vigor.

COROL. IV.

HENCE thoſe Medicines beſt reſolve the Obſtructions of the ſeveral affected Viſcera, and of Conſequence, cure the Diſeaſe, that conſiſt of Particles that may increaſe the Blood's *Momentum*, add a Stimulus to the Solids, and reſtore them to their proper Tenſion and Springyneſs.

By

BY theſe Conſequential Arguments and Reaſonings, and the Corollaries reſulting therefrom, it moſt clearly appears, that the want of Nouriſhment in Conſumptive Habits, depends entirely upon the attracting Principle of the Blood being too much increas'd, that is, from its Particles too ſtrongly cohering among themſelves, from the Solids being too much relax'd in their Springs, or depreſs'd beneath their natural Standard: The beſt way, therefore, to render the Blood more Nutritive, is to give it a greater Fluidity, eſpecially its Globules; and the beſt way to effect this, is to reſtore the Solids to their proper Stricture, whereby they may divide the Blood fine enough, to diſengage a ſufficient Quantity of nutritious Particles, for the Reſtoration of the ſeveral impair'd Parts.

CHAP.

CHAP. II.

Of the Conatus or Endeavour of Nature and its Mechanical Affections, in the Cure of Decays, Waſtes, and Conſumptions.

BUT before I proceed to explain the Advantages we receive in the Cure of Conſumptions, from a right, regulated Courſe of the Non-naturals, in Conjunction with a juſt Adminiſtration of Medicines; I muſt intreat the Reader's Patience, till I expatiate a little upon the Advantages the Conſtitution receives from the Endeavours of Nature; that is, from the Powers lodg'd in the Solids and Fluids to reſtore themſelves; for in the Cure of Conſumptions, we ſhall, in ſome Cases, have occaſion for all the little Helps and Aſſiſtances we can poſſible obtain, whether they relate to Nature herſelf, the Non-naturals,

naturals, or the Administration of proper Remedies.

IN the first Part of this Treatise, I have observ'd, that the Solids are the Principal Agents in supporting the Actions of the Animal Oeconomy; and that the Heart is the chief Organ that directs all the greater Springs and under Motions of the whole Body: I shall here go on to consider the Powers lodg'd in those Instruments of Health and Diseases, and the Conatus's or Endeavours they exert, when any of the Parts are oppress'd or over-borne with Obstructions, or the Force of a Disease.

THIS Exertion of the Solids and Fluids, and their superior Motions, inducted upon the Accession of the foregoing Obstructions, we call the Endeavours of Nature; and thus we often speak with great Propriety, when we say, That Nature will help herself; I'll leave it to Nature; Nature will cure the Disease, *&c.* All and every of which Expressions, how far they are warrantable, and safely may be relied upon in

the Cure of Diſeaſes, will appear from the following Obſervations:

THE Laws of Nature, when apply'd to the Conſtitution of Animal Bodies, are the Laws of Matter and Motion; or, rather, that I may expreſs myſelf in Terms as little ambiguous as poſſible, the Laws of Motion applied to the Syſtem of the Solids and Fluids, by which they are exercis'd for the Benefit of the human Machine, that is, agreeable to the Standard of Health.

IF we deſcend to examine, accurately, into the Grounds of this Conatus or Endeavour, we ſhall perceive it intirely to ariſe from a Principle of Reſtitution lodg'd in the Mechaniſm of the Solids and Fluids, whereby they endeavour to reſtore themſelves in all Caſes, where any of their Organs are clogg'd or obſtructed.

NOTHING can Illuſtrate this Force of the Solids, to reſtore themſelves, more clearly, than that vaſt Extenſion the Fibres of the *Matrix* ſuffer during Woman's Labour, and the wonderful Propenſity with

with which they reſtore themſelves, after they are freed from their Diſtraction. It is ſurprizing, with what an Elaſticity they contract their Machinulæ, renew their Attractions, and reſtore the ſeveral over-extended Parts to their natural Tone and Dimenſions again, after the Iſſue of the Birth; which I could greatly Illuſtrate, were it a Subject fitting for this Diſcourſe.

IN this, therefore, does the Structure and Mechaniſm of Animal Bodies infinitely tranſcend the moſt curious Contrivances of Art, inaſmuch as the moſt expert Mechaniſt never attempted to frame a Machine that would reſtore itſelf, and which, when effected, would be the boldeſt Stroke that ever was given for diſcovering the perpetual Motion.

IF the Movement or Springs of the fineſt Watch or other curious Engine, are, by any means, letted or impeded in their Motions, they can no longer regularly direct the Hour or Minute Hand, till the Artificer has adjuſted the Ballance, and recti-

fied the Diſorders of the Wheels: But the Human Machine can reſtore itſelf; and under a great many Diſorders, as well Acute as Chronic, does often give the greateſt Aſſiſtance. This is the Reaſon, why *Hyppocrates*, and almoſt all the Ancients, ſo greatly magnified the Operations of Nature, that, according to their Way of treating this Subject, one would take her for ſome Divinity plac'd in the Body, to guard the ſeveral Parts from any dangerous Conflict.

BUT we ſhall have no Reaſon always to call in a preternatural Intelligence to rectify the Diſorders of the Body, if it certainly appears, that the Solids and Fluids have a ſelf-reſtoring Power lodg'd in themſelves, to raiſe and fall their Motions when affected with any imminent Preſſure.

INDEED it is impoſſible to account for thoſe ſurprizing Changes ſometimes brought about in the moſt dangerous Diſeaſes, from the ſlighteſt, moſt trivial, and often contemptible Means, without admitting the Conatus of Nature to have a great

great Share in producing the Operation. That an Ounce and Half of Syrup of Rhubarb taken in the Morning, which will hardly purge a Child of five or ſix Years old, ſhould abſolutely cure a confirm'd Dropſy, by giving the Patient near Sixty Stools in the Compaſs of two Days, that all the moſt generous Medicines, preſcrib'd in that very Caſe, made not the leaſt Impreſſion upon, muſt appear ſurprizing; and if we aſſign this wonderful Event to the Force of the Syrup alone, it will be impoſſible to determine the Doſe of a Medicine with Certainty, in any given Circumſtances. For an Ounce and Half of Syrup of Rhubarb, could not give a grown Man above five or ſix Stools; or at leaſt it could not exceed a ſtrong Decoction of Sena and Rhubarb, with an Ounce of Syrup of Buckthorn added to it; eſpecially if the purgative Force of a Medicine depends upon its ſtimulating the Inteſtines to a Diſcharge of their Contents: Yet the contrary happen'd in this very Caſe I am now treating of; and this laſt Medicine gave the Patient but ſeven or eight Stools, while the Ounce and Half of Syrup of Rhubarb

discharged near Sixty in two Days Time, which, to me, I must confess, was surprizing; nor could I ascribe this extraordinary Operation to any thing but the Endeavours of Nature assisting the Medicine at that happy Juncture to the Discharge; which was attended with that happy Success, that to this Day he has not the least Appearance of any dropsical Disorder attending him: Nor do I relate this Case as a singular Instance; for I have known a Scruple of *Gascoign*'s Powder, joyn'd with Six Grains of the Volatile Salt of Harts-Horn, and an Anodyne Draught, with Six Drams of Syrup of Diacodium, carry off the most dreadful Symptoms in the Height of a malignant Fever, by giving him near Forty Stools; which I doubt not, will seem incredible to those that are not appriz'd of the Structure and Mechanism of Animal Bodies, and how wonderfully Nature often exerts herself in its Defence.

But what is most surprizing that ʒj Ol. Amigd, Dulc. & ʒvi Syr. Alth. commixt, should force off a Stone by the Urinary Passages above an Inch long, and full an Inch

Inch in its Dimenſions, when all other Means had been try'd in vain; and I queſtion not, but that a vaſt Number of Medicines, that Authors have been pleas'd to dignify with the Title of *Stone-breakers*, owe moſt of their Specifick Vertue, to a happy Hit, or their being given in a lucky Hour, when Nature, at the ſame Time, was buſied in diſcharging the Calculus Matter; the Medicine conſpiring with the Endeavours of Nature, procur'd an Operation that neither of them ſeparately could effect; and which a Thouſand After-tryals may convince the Phyſician of the Inefficacy of the ſame Medicine, without the like Aſſiſtance of Nature: And in this Senſe, the Phyſician may rather be call'd Nature's Aſſiſtant than her Servant; as he often helps her to fling off a Load ſhe is unable to grapple with herſelf, and under which, ſhe often muſt fall a Sacrifice, if not upheld by the Phyſician's Aid and Aſſiſtance: His Buſineſs is to cheriſh, enliven and exalt her, when ſhe droops, and to give new Life and Vigour when ſhe is impair'd by the Violence of a Diſeaſe; ſo that in many Caſes he is obliged to over-rule, rather than obey her

Directions, as may be inſtanc'd in great Fevers, when ſhe often makes an unſeaſonable Effort; which would certainly prove the Deſtruction of the Patient, were not the Phyſician, in ſuch Caſes, to counteract her Endeavours.

IF we inquire a little farther into theſe Conatus's, or Endeavours of Nature, we ſhall diſcover them to ariſe from a peculiar Mechaniſm of the Solids, ſo wonderfully contriv'd, that when no Obſtructions clog up the Glands or ſmalleſt Arteries, they are capable of playing the florid Stream into the minuteſt Fibres, without the leaſt perceivable Friction or Reſiſtance; which Freedom of the Circulation is intercepted, if any of the Organs happen to be obſtructed.

TO explain this Conatus or Endeavour of Nature, or natural Impulſe of the Solids, or Conſpiration of the ſeveral Parts, in order to reſtore the Conſtitution labouring under the Preſſure of a Diſeaſe, a little more clearly, I ſhall lay it down as a Self-evident Maxim, That no Diſeaſe can happen to the

the Body, but what must arise from Obstructions; and these obstructed Parts will refuse a free Passage to the Blood; and, consequently, there will be a lesser Compass for the same Quantity to play in; which will be the same, as if the Quantity itself were augmented in the unobstructed Vessels, for it will induce a Plethora, and oblige the Heart to redouble its Contractions, which will force the Blood with a superior Impetus against the obstructed Parts, in order to their Disingagement. This greater Impetus thus sent to the obstructed Parts, clearly appears, according to this mechanical Way of Reasoning, to arise from the Heart's greater Impulse exerted from the Obstructions themselves, that infer a Plethora in the unobstructed Vessels, that either resolves the Obstructions, and, consequently, cures the Disease, or excites a Fever of the Hectick Kind; so that the Hectick Fever in Chronick Diseases, is the Effect of the Plethora, to disingage the Obstructions, which Fever always ceases, as soon as ever the Circulation becomes freer, and the Obstructions are discuss'd.

THIS

THIS is, then, what I mean by Nature's aſſiſting or relieving the Body of a Diſeaſe. That the mechanical Structure of the Solids are, in ſuch Caſes, ſo ſurprizingly contriv'd, that it's impoſſible that Obſtructions can happen to any Organ or Bowel, without inducing a Plethora, which Plethora will force the Solids upon this Mechanical Neceſſity; that is, this Plethora will infer a Neceſſity on the Solids, to redouble their Contractions, in order to diſingage the Obſtructions; ſo that as ſoon as Obſtructions poſſeſs any particular Part, ſo ſoon will the Solids of all the other Parts exert their Endeavours in order to reſolve the Obſtructions of the affected Part, and give a Freedom to the Circulation: ſuch a Harmony, Dependance and Conſent, have all the Parts on each other.

WHAT I would infer from the Tenour of this Diſcourſe, is, that though the Phyſician may help Nature, by acting in Conjunction with her; yet ſhould he be highly careful never to oppreſs her; that is, never to oblige her to do Impoſſibilities, and that

is,

is, to Cure incurable Diſeaſes; for though a little Force communicated to the Solids, in Conjunction with Nature, will enable her to diſengage conſiderable Obſtructions, the Cauſes of very dangerous Diſeaſes; yet all the Force we can give, will little avail in relieving the Obſtructions attending an indurated Liver, ſchirrous Spleen, or ulcerated Lungs; eſpecially if they have been of any conſiderable Standing; for in theſe Caſes, the Force capable of reſolving the Obſtructions, would be little leſs than a Force capable of Sapping the Conſtitution, Undermining the Habit, and Ruining the Texture of the whole vaſcular Syſtem: So that all that can be expected under theſe Circumſtances, is to palliate the Symptoms, appeaſe the Pains, and give the Patient what Relief he poſſibly can expect, under theſe miſerable Circumſtances.

INDEED, towards the latter End of the laſt Century, a bold Attempt was ſet on Foot; and the Deſign was to over rule Nature, and reſtore the Decays of old Age, by the Transfuſion of Blood from young, into the Veins of old Men, almoſt worn out

The Unreaſonableneſs of the Transfuſion of human Blood.

out with Age. It was conceiv'd, that extraordinary Advantages would accrue to the Conſtitutions of thoſe that would abide the Experiment: But, upon Tryal, nothing ſucceeded to keep up its Reputation: Nor can I perceive any poſſible Advantages can accrew to the Body from ſuch Experiments, that is, from Injecting a certain Quantity of Blood from the Veins of a hale, ſound, young Man, into thoſe of an old, decrepid Carcaſs; for the Veſſels in the latter, being too much relax'd, would ſoon ſuffer the new-receiv'd Blood to fall into all the Coheſions, Contacts and Properties his old Blood was liable to before its Emiſſion; and, conſequently, it would be the ſame Blood after a few Circulations; or, at leaſt, Blood endu'd not with different Properties, which is the ſame thing. Add to this, the Danger of bringing in a new Gueſt, unſuited to the Laws of Circulation, to which his own Blood was ſubject to, before he parted with it in the Experiment; as alſo its Incapacity of obeying the Laws of Motion, communicated to it from the Impulſe of the Solids in new Channels. Theſe new Properties and

Alter-

Alterations would be enough to change its Motions, and, consequently, of inferring great Danger to the Mechanism of the several Parts; as I am creadibly inform'd, happen'd to some of those that underwent the Experiment.

IF, indeed, we could screw up, alter, or restore the Solids to a good vigorous State and Action, at the same time that the Transfusion was made, it would then be possible to renew the Age of old People; and of old stale Maids, to make young blooming Virgins again; but till some certain Methods are discover'd, by which we may restore the Texture of the Solids, I am very much afraid Nature will have her Course, and the only Way left to make her look young, blithe and gay, under the Decline of Age, will be, to keep up to a regular Way of living in our younger Years.

THE Sum of all this, is, That there is no invisible Divinity, Intelligence or Archeus lodg'd in any of the Parts; but that the Assistance given from what we call Nature, in

in the Cure of Diſeaſes, is the Reſult of the Mechanical Motions of the Solids and Fluids; and that theſe Motions, thus ſurprizingly conſtituted by the Divine Architect, in our firſt Formation, are not only the Laws, but what we mean by Nature itſelf, as often as this Word is applied to the Mechaniſm of Animal Bodies.

CHAP. III.

Of the Air, Diet, Exerciſe, and the Paſſions; and their Mechanical Affections in the Cure of Conſumptions.

FROM the Arguments and Reaſonings of the foregoing Chapter, it clearly appears, how very much we are beholden to the Endeavours of Nature in the Cure of Diſeaſes; and how wonderfully ſhe exerts the ſeveral Springs and Motions of the Conſtitution, for the Recovery of Health. Now it is the Phyſician's

Part

Part to help Nature in her Efforts, and give her all the Aſſiſtance he is able, in order to conquer the Diſeaſe: And I cannot conceive how we can better begin the Cure of Conſumptions, than by rightly inſtituting the Non-naturals, that is, by regulating the Air, Diet, Exerciſe and the Paſſions, in ſuch a Manner, that they may beſt conſpire to the Reſtoration of the Conſtitution, under the Preſſure of a Decay.

As we have aſſign'd the Autumn, or Fall of the Leaf, as the Time that moſt diſpoſes the Body to Conſumptions; ſo the beſt and higheſt Advantage the Patient can expect, is to be had from the ſucceeding Spring. This is the Time when the Blood is in a higher Ferment than at any other Seaſon of the Year; a Time when the Solids moſt abound with Moiſture; and as conſumptive People want Blood, this is the Seaſon moſt proper for recruiting the Solids with that Fluid, and, of conſequence, of reſtoring conſumptive Habits; And the Seaſons ought as much to be regarded, or rather more, than the Qualities of the Weather; for they give more conſiderable Alter-

Alterations to the whole Animal Conſtitution. And as the preceding Winter's Cold contracts the Fibres, retards the Motion of the Fluids, and, conſequently, binds up Obſtructions upon the Habit, that generate Decays; ſo the genial Warmth, that attends the approaching Spring, dilates the Solids, expands the Motion of the Fluids, and reſolves the Obſtructions; and hence ariſes the Reaſon why all Bodies are conſiderably plumper, fuller and jollier in the Spring and Summer, than in Autumn and Winter, and why the Cure of all Diſeaſes is more ſucceſsfully attempted at thoſe Times, than at any other Seaſon in the Year.

I muſt confeſs, we ought to pay a very great Regard, as well to the different Nature of the Decay, as Conſtitution of the Patient, before we determine the Qualities of the Air that may prove moſt ſalutary to the Cure of the Diſeaſe; for all Decays, Waſtes and Conſumptions of the Atrophical Kind, and that are without an Ulcer of the Lungs, demand a fine, light, open Air, moderately Cold, and free from high Hills, great Mountains, or lofty Woods, that

that may intercept the free Breeze; and take off from its Spring; and if the Ground be rather riſing, ſuch as *Hampſtead*, *Highgate*, and *Black-heath*, ſo much the better; and thoſe Grounds are always preferable to live on, where the Soil abounds very much with pleaſant Flowers, whoſe fragrant Particles, the Air will not fail to convey in pleaſing Senſations to the Brain and Faculties of the Senſes: For the Air of all Climes extremely abounds with the Vertues of thoſe Plants or Flowers where it comes, which muſt, of conſequence, convey not a few of their balmy healing Qualities to the Lungs of thoſe Perſons it environs: For this Reaſon, alſo, I ſhould mightily approve of a fine, thin, ſubtile Air, that is clear, and well impregnated with Nitre; which may add a Stimulus to the Conſtitution, increaſe the Secretions, reſolve the Obſtructions, and reſtore the contractile Powers of the Solids, and, conſequently, a Freedom to the Circulation. To this End, greatly avails the Air that breathes from a Ground, rather riſing on a Soil gravelly, which is not ſubject to Lakes, Fens or ſwampy Marſhes.

ON the contrary, a moderately warm Seaſon is moſt agreeable to all hectical Diſpoſitions, or ſuch as labour under a Phthiſis or Conſumption of the Lungs; for ſince, in ſuch Caſes, there is little Expectation of an abſolute Cure, we muſt endeavour to give the beſt Relief we are able, and draw Life out to the longeſt Period of Time. In all Conſumptions where an Ulcer affects the Lungs, a ſharp Air ever proves pernicious; for it over-raiſes the contractile Powers of the Solids, and increaſes all the natural Secretions, and though, by this means it may greatly help to reſolve the Obſtructions, and diſingage the Viſcidities and Coheſions of the Blood, by adding a Stimulus to the Solids, yet it will thereby naturally increaſe the Cough and Fever, if not endanger a Looſeneſs, by exciting ſuch a Hurry and Inteſtine Motion among the Juices, as will not a little incommode the Patient; and this is the Reaſon why froſty Seaſons prove ſo diſturbing to Phthiſical People, for it cuts, ſearches and penetrates into their very Vitals; they are always chilly, unleſs continually hovering over the Fire, and can ſcarce perceive

ceive themſelves warm, even in that Situation. In all ſuch Caſes, I would recommend the Patient to the Vales and lower Grounds for his Habitation, and he will perceive *Kentiſh* Town and *Hackney* much preferable to *Highgate* or *Hampſtead*, although theſe latter may prove more friendly to thoſe that labour under a Tabes, where there is no Suſpicion of an Ulcer.

INDEED, in the midſt of Summer, and in ſultry Weather, I ſcarce think any Air can be too cool, and therefore the Patient may take the Advantage of what Situation pleaſes him beſt, and where he perceives Company moſt agreeable to his Temper, Genius and Diſpoſition; but, above all, he ſhould pay a peculiar Regard to his own native Air, wherein he was born; for though none of the beſt, yet we have ſuch Inſtances, where it has prov'd viſibly efficacious in relieving the Decay, where no other could make the leaſt Impreſſion upon the Diſeaſe: And for this Reaſon, if it can be had, it ought to be preferr'd before all others, however recommended for their Salubrity.

In the former Part of this Diſcourſe, we have clearly diſcover'd, that high-ſeaſon'd Meats, poignant Sauces, and rich generous Wines, when indulg'd to Exceſs, raiſe the contractile Powers of the Solids, increaſe the Secretions above their natural Standard, and enervate the Conſtitution; whereby they ſap, undermine, and weaken the ſeveral Springs of Life: And as theſe Decays plainly appear to ariſe from this diſorder'd Way of Living, ſo I ſhall proceed to conſider the moſt proper Method of Diet, in order to reſolve the Obſtructions, increaſe the Secretions, and reſtore the Springs of the ſeveral impair'd Solids to their priſtine Vigour, as the only Way to obtain this invaluable Bleſſing of Health.

The Aliments moſt friendly to conſumptive Natures.

Now, as in Conſumptions, the Solids are impair'd, effete, and languid; ſo it will appear, that thoſe Meats are the moſt agreeable in Decays, that are eaſieſt of Digeſtion; and thoſe Meats will be eaſieſt of Digeſtion, that conſiſt of Principles that make the leaſt Reſiſtance to Diviſion; on this Account, all Fleſh-Meats will be forbidden,

bidden, as hard of Digeſtion; and as Meats wholly conſiſting of Fibres variouſly interwoven, twiſted and twin'd with each other, and whoſe Subſtance, therefore, is not ſo eaſily ſeparated, untwiſted, or diſſolv'd by the Force of the Stomach, and, conſequently, leaſt fit for conſumptive Habits.

I ſhould, therefore, prefer a Diet upon Vegetables and the lighter Animals; that is, thoſe that contain the leaſt Blood. To this End and Purpoſe, beſt agree Oyſters, Cray-fiſh, Viper-broth, Chocolate, Hart's-horn Jelly, or that made of Calves Feet; as alſo new-laid Eggs, Cow's-Milk; Aſs's-Milk, and Womens Breaſt-Milk, which laſt, I muſt confeſs, in my Judgment, is to be preferr'd to all others, eſpecially in deplorable Caſes, for Reaſons I ſhall hereafter give. However, it muſt be acknowledg'd, that Milks, in all Ages of Phyſick, have been juſtly extoll'd, as the moſt ſovereign Balſam in Conſumptions: And as this Diſeaſe ariſes from an over-great Laxity of the Solids, whereby they cannot divide the Fluids fine enough for Nouriſhment; ſo Milk will every way ſupply us with

Principles equally ſoft, healing and dividable, that will eaſily yield to the Impreſſions of the Solids, and produce a Nouriſhment conform to their Conſtitution, and the Repairs of their decay'd Texture; and the finer and thinner the Milk is, upon this Occaſion, the eaſier and quicker will be its Digeſtion, Separation and Aſſimulation: and for this Reaſon, the Aſs's-Milk is moſt prevalent in Conſumptions, becauſe it conſiſts of the moſt fine, ſoft, light, attenuating Particles; becauſe it moſt eaſily paſſes the fineſt Strainers of the Body, and its Separations are made with the leaſt Reſiſtance from the Solids. For this Reaſon, alſo, the Juice of Turnips is deſervedly eſteem'd a moſt excellent Analeptick or Reſtorer in Conſumptions, becauſe it eaſily ſeparates, and is ſooneſt work'd into the Conſtitution. Marrow Puddings, Sagoe boil'd in Milk, and Viper Broths, are by no means to be omitted; young Chickens alſo, and Aſparagus in Seaſon, may be permitted; but, above all, he ſhould be very careful, that he offend not in the Quantity of his Aliment, which will charge a Load of Chyle upon the Habit, greater than it can digeſt; and

this is the Reaſon why, after a full Meal, the Patient is hot and feveriſh, and liable to be affected with looſe Stools; ſo that under any ſignal Weakneſs or Decay, the Patient ought to be indulg'd little more than the Solids can digeſt into good Nouriſhment, which will afford a leſs Quantity for the ſeveral Diſcharges, and, conſequently, give the Solids, miniſtering to theſe Diſcharges, time to reſtore themſelves; for Nature is always endeavouring at the Relief of the Body, and thoſe Hectic Heats and Conflicts that enſue upon a plentiful Repaſt, are the Endeavours of Nature to diſlodge the new Charge of Chyle; and theſe Endeavours ariſe from the Heart's redoubling its Contractions, in order to relieve the Solids, burthen'd with this new Load, by diſcharging it off at ſome of the Evacuations; that is, either by Stool, Urine, or inſenſible Perſpiration.

GIVE me leave to relate the following Caſe, which will clearly make it appear how much a thin, ſpare, attenuating Diet contributes in the Cure of Conſumptions. Mrs. *Dobinſon* had long labour'd under the

laſt Degree of a Conſumption, in which her Stomach was ſo affected with Loathings, that ſhe could not endure the Sight of Meats, and the very Smell affected her in a very ſenſible Manner; ſhe was tir'd with Broths and Soups, on which ſhe had long liv'd: In theſe deplorable Circumſtances I was conſulted, and obſerving her Averſion to all ſolid Meats, and a great Part of Fluids, I determin'd to try the Efforts of Aſs's-Milk, and abridg'd her Diet to that only; and of that I allow'd her no more than Half a Pint in the Morning for her Breakfaſt, a Pint for her Dinner, and Half a Pint for her Supper; and in caſe of Fainting, a Glaſs of Red Wine was conceded with a Naple Biſcuit. This was her Diet for Twelve Days, with the Addition of a Marrow Pudding; in which Time ſhe manifeſtly perceiv'd her Appetite to revive, her Stomach to come too, and her Strength and Spirits to reſtore; ſo that I was prevail'd upon to inlarge her Diet, with which, and a few choice generous Medicines, ſhe intirely recover'd her former State of Health; though there was a ſtrong Suſpicion, from her troubleſome Cough and large Expectoration,

tion, that either a Tubercle or Vomica was form'd upon her Lungs.

THE Sum of all this is, that we ſhould be highly careful, that the Patient never over-charge his Solids with any Aliments, although agreeable in the Cure; for this Exceſs will prove more pernicious to the Conſtitution, than thoſe that are apparently oppoſite to his Diſeaſe, but given in leſſer Quantities, as appears from this very Caſe I have related.

AFTER I have thus far proceeded to Inſtitute a Diet moſt friendly to conſumptive Natures, I ſhall now go on to conſider, by what Means it may moſt commodiouſly be diſtributed into the ſeveral Parts for their Nouriſhment; and that will appear to be beſt effected by Exerciſe.

WE have demonſtrated in the former Part, that the Body cannot long ſubſiſt in Health without Exerciſe, and that the Attracting Principle of the Fluids would naturally be an Over-match for the Powers of the Solids, were they not aſſiſted by this Non-

Non-natural; and in Fact, daily Experience confirms this important Truth, That nothing enervates the Conſtitution more, than a Life led without Motion. Now, as the Blood is always over viſcid in conſumptive Habits, and, conſequently, its Particles too large to paſs the minuteſt Arteries, ſo the beſt way to remove thoſe Viſcidities and Obſtructions, is to apply a Force that may break, divide, and attenuate the Blood's Particles, and, conſequently, render it fluid enough to paſs the ſeveral Strainers of the Body; and the propereſt Way of effecting this, is by Exerciſe or Motion; and the propereſt Motion in Conſumptions, is either Riding on Horſe-back, in an open Chaiſe, or the ſailing in a Ship, all of which are greatly efficacious in the Reſtoration of decay'd Habits.

Of the Way that Exerciſe Operates, in order to reſtore the Conſtitution.

BUT it may not be improper here to attempt to diſcover the Manner how Exerciſe operates, in order to reſtore the ſeveral Springs of the Fibres in Conſumptions. We have obſerv'd, in the ſecond Chapter of this Treatiſe, that the Solids of all Animal Bodies, have a ſelf-reſtoring Principle,

ciple, whereby they conſtantly endeavour after Perfection; that is, that, in the Conſtitution of all Animal Bodies, there is lodg'd a *Vis*, Force or Power, that reſults from the Mechaniſm of the Solids and Fluids, whereby they tend to reſtore themſelves. Now this Tendency, when Nature is not able to accompliſh the Cure herſelf, is greatly aſſiſted by Exerciſe, if rightly adapted to the Conſtitution: For the attracting Principle of an Animal Fibre, in living Animal Bodies, upon the Application of Motion, will be greater than its Power of Diſtraction, and, conſequently, Exerciſe, rightly applied, muſt greatly contribute to the reſtoring their Machinulæ to cloſer Contacts with each other: Some ſuch Way it muſt be, that Exerciſe has this Advantage of reſtoring the Texture of a Fibre, and, conſequently, its contractile Powers; for were the diſtracting Principle of an Animal Fibre, upon the Application of Motion, greater than its attracting Principle, or that Power by which a Fibre contracts its Machinulæ, then a Relaxation of the Solids muſt enſue, upon the Application of Exerciſe, and, conſequently, the Decay be increas'd.

BUT

BUT the contrary is visibly evident to all that have had Occasion to use the Power of Exercise for the Relief of their Bodies under Consumptions; for though all may not have received an absolute Cure, yet few, I believe, there are, that have not met with some Advantage.

IT's impossible to conceive the Benefits that arise to the Constitution from Exercise, either on Horse-back, in a light open Chaise, or sailing in a Ship; the Two former resolves the Obstructions of the Stomach and other Viscera, enlarges the Secretions, and restores the Texture of the Solids: Besides, Riding is an Exercise that puts the several Parts of the Body to the least Stress; for while we are on Horse-back, or in an open Chaise, we cannot be said so well to exercise, as to be exercis'd, for the Man, to all Intents and Purposes of Labouring, is passive, and the Horse exercises or works him; so that this Motion is equally apply'd to all the Parts of the Body, without the least Resistance from himself: And this Exercise may be so varied, intended or re-

remitted, as to give Relief to all Ages, Conſtitutions and Degrees of Conſumptions; for he may keep his Horſe to what Pace he pleaſes; and if a Trot be too jolting, he may put him to a Hand-gallop, may Amble, Pace, or Walk him. And, indeed, I have my ſelf, under a dangerous Decay, received ſo much Advantage from this Exerciſe of Riding, that I cannot but, in the moſt earneſt Manner, recommend it to all that perceive their Conſtitutions begin to give way, as the moſt likely means to recover their Healths. And I think it would not be improper, if the Patient, as ſoon as he perceives the firſt Symptoms of Decay, were to take a Journey of ſeveral Hundred Miles, gradually increaſing the Day's Journey, as he perceives himſelf to recover his Strength; I ſcarce think there is any Decay, not rivetted upon the Conſtitution, but what would give way to ſuch a Procedure, eſpecially if, at the ſame Time, he be careful to regulate his Diet, and the reſt of the Non-naturals.

IT is certainly very difficult to account for that extreme Sickneſs and Vomiting, that ariſe in ſome Conſtitutions, from the Motion

Motion of a Ship under Sail, eſpecially in bad Weather. All that we can conceive of this Operation is, that it communicates to the Solids an Oſcillitory Motion, whereby every Fibre is ſet a working, which from all the Parts of the Body, conveys the Juices to the Stomach, to be pump'd up by Vomit, for they prove an Over-charge to this Bowel, in the ſame manner, as a greater Quantity of Juices proves an Over-ballance to the Heart. Now, as the Juices from the moſt diſtant Parts of the Body are flung up into the Stomach, ſo the Solids in theſe Parts, firſt reſtore their Machinulæ, and bring their Indentations into cloſer Contacts; that is, they purſe up the over-relax'd Fibres; and this is done without the leaſt Force, beſides what Nature excites from the Structure and Mechaniſm of the Solids and Fluids, thus affected by the Motion of the Ship.

Of Sea-Sickneſs, and its Advantages in Conſumptions.

THE Benefit the Conſtitution receives from Sea-Sickneſs, is, that the Tone of the Solids, in every Part, are wound up to a greater Degree of Tenſity, Springyneſs and Vigour; and the Obſtructions of the Stomach and ſeveral Viſcera are intirely reſolv'd,

ſolv'd, which, if timely undertaken, recovers any Decay before it can gain a firm Settlement upon the Habit.

THE Paſſions are the laſt of the Non naturals, that demand our Conſideration, both as they come not in Play till all the other Non naturals have perform'd their reſpective Offices; and as they have their Seat neareſt the Fountain of the Intellectual Faculties, and give the firſt Notice to the Body of any Hurry or Diſorder that may happen to the Mind.

IF the irregular Paſſions are only immoderate Deſires, elevated or depreſs'd above or beneath the natural Standard of the Mind, as I have already intimated in the former Part of this Diſcourſe, then will it appear of what great Conſequence it is, that we endeavour to rectify their Diſorders, and, as far as poſſible, prevent their extravagant Excurſions; for the over-heightning or too much depreſſing of their irregular Sallies, will certainly have a great Influence upon the Motions of the Blood, and other Juices, and, conſequently, intercept their being receiv'd into the ſeveral Parts for Nouriſhment.

THERE-

THEREFORE, as much as poſſible, let the Patient be excited to chearful and innocent Recreations, and thoſe little Whims and Fancies they are moſt ſubject to, while they labour under Decays, muſt be indulg'd. On this Occaſion, all the dejecting Paſſions ſhould be baniſh'd, and Objects only admitted that may create gay, merry and chearful Scenes. In this Caſe, I ſhould think it highly detrimental, too much to play with the gloomy Proſpects of Death, unleſs manifeſt Symptoms appear of his approaching Diſſolution; for the haggar'd Aſpect of this grim Monſter, has ſomething in it repugnant to the very Laws of our Nature, and which is able to damp the Spirits of the braveſt Man, however fully perſuaded, that his better Part is Immortal.

CHAP. IV.

SECT. I.

Of Relieving the Symptoms that increaſe the Decay, and haſten on the Conſumption.

BUT in vain do we attempt to ſurmount the Difficulties that attend the Cure of Decays, Waſtes and Conſumptions; if we have no other Inſtruments to aſſiſt the Conſtitution with, than what ariſe from the Endeavours of Nature, and the right Adjuſtment of the Non-naturals; the Patient will infallibly miſcarry, if he intirely depend on their Aſſiſtance for his Recovery: Therefore our next Care muſt be, to examin into the Nature of thoſe Symptoms that threaten moſt Danger, and in this reſpect, great Regard muſt be had to their Cauſes.

Of the Symptoms moſt dangerous in Conſumptions.

THE Symptoms that, under Decays, indicate moſt Danger, and which generally haſten on the Conſumption, are the Melting Diarrhea, the Flux of Urine, the Colliquative Night-Sweats, Cough and Spitting or Vomiting of Blood; and the Cauſe of all theſe Diſcharges moſt generally ariſes from the Strength and Mechaniſm of the Heart not decaying in Proportion to the Strength and Mechaniſm of the Parts miniſtring to the Evacuations; whereby the Juices are caſt off in greater Quantities than the Conſtitution can well ſpare, without defrauding the ſeveral Parts of their neceſſary Nouriſhment.

THE Reaſon, therefore, why moſt of the acute Symptoms under Decays are ſo difficult of Cure, is becauſe the Solids, miniſtering to the ſeveral Diſcharges, cannot be ſo tightly reſtor'd, as to make Reſiſtance to the ſuperior Force and Impulſe of the Heart's Motion: And if it ſo happen, that, by the Adminiſtration of the moſt generous Remedies, we gain a Truce upon the Bowels, and oblige the Diarrhea for ſome time to re-

remit; yet it is a Thouſand to one, but that the Diſcharge thus ſuppreſs'd, will turn upon ſome other of the Evacuations, and carry off as much of the nutritious Juices, as if the Looſeneſs had continued.

IT will therefore be impoſſible, abſolutely to cure the Symptoms, that is, to brace the Solids miniſtering to the ſeveral Diſcharges, till we have reſolv'd the Obſtructions, the Grounds of the Diſeaſe, and which is the ſole Cauſe why the Evacuations are irregular; and this is the Reaſon why, in Conſumptions, we find the ſeveral Evacuations ſo difficult of Cure; but eſpecially the Diarrhea and Night-Sweats; for theſe two Evacuations intirely depending on the ſlow erratic Fever, if the Conſumption is a Beginning; or on the Hectic Fever, if the Decay has made any conſiderable Advances, and the Hectic Fever on the præternatural Beating of the Heart; and the præternatural Beating of the Heart on the Plethora; and the Plethora on the Quantity of Obſtructions charg'd upon the Viſcera and other Organs of the Body; and the Quantity of Obſtructions on the Relaxation

of the Solids; and the Relaxation of the Solids on the Non-naturals, which excite all the foreſaid Phenomena's, as we have at large diſcours'd in the former Part of this Treatiſe: It will follow, that we never can intirely relieve the Flux and Night-Sweats, if we do not firſt reſolve the Obſtructions, reſtore the Tone of the Solids, and, by that means, give a Freedom to the Circulation: And hence appears the Reaſon why we make ſo little Progreſs in the Cure of Conſumptions, becauſe we go on to tye up the Evacuations before we reſolve the Obſtructions, or any ways attempt to diſingage the impacted Matter lodg'd upon the Habit; that is, we immediately proceed to cure the Effects, before we remove the Cauſes, and by this prepoſterous Method, faſten the Cauſes, and rivet them more firmly upon the Conſtitution, that is, we render the Diſeaſe more incurable.

The Diarrhea or Looſeneſs, therefore, greatly incommodes the Patient, and haſtens on the Decay, eſpecially when the Diſcharge is immediately ſupply'd from the Blood, by means of the Inteſtinal Glands.

I

I SHALL, therefore, in the first Place, endeavour to palliate this Symptom, and prevent, as much as possible, its irregular Excursions. In this Case, I have always observ'd great Relief given from these Medicines that gently evacuate the first Passages, moderately brace the Intestines, and that, in some Measure, restore the Spring of the Intestinal Glands.

THE following Prescription will be an admirable good Administration, to gain a Truce from this Discharge.

℞ *Pulv. Rhabar. tost. gr.* xii. *ad gr.* xv. *vel* ℈ i. *Croc. Pulv. viperar. ana gr.* iv. *Laud. Lond. gr.* i ß *ol. Cin. Chim. gt.* i. *m. f. Bol. cum q. s. Syr. Garioph. Statim sumend. vel dissolv. in Vin. Canar.* ʒiiß.

℞ *Gelatin. e. Carne Viperar. cum Spoliis sine Acid. ppt.* ʒiß *Capt. omni Mane & hora* 4ta *pomerid. superbib. Coch.* iii. *seq.*

℞ *Julep. Reg. Aurat.* ʒvi. *Aq. Rosar. rub.* ʒiv. *Spt. Nitr. Dulc.* ℥ß *Syr. Balsam.* ʒß *m. Julep. Capt. Coch.* iv. *in Languoribus.*

THESE are the moſt generous Medicines, and what ſeldom fail to cheriſh the Bowels and palliate the Flux, as far as is neceſſary, in order to go upon the Cure of the Diſeaſe.

SOMETIMES, if the Strength of the Patient will bear it, and the Looſeneſs remit not with the foregoing Remedies, I preſcribe a Doſe of the *Indian* Root, and work it gently off, which oftentimes gives great Relief, where all other Medicines fail.

IF the Flux conſiſt of very liquid Stools, and obſtinately perſiſt to affect the Bowels, after the Cauſes of the Diſeaſe are remov'd, then let the Patient take the following Pills, which will greatly reſtore the weaken'd Spring of the Inteſtinal Glands.

℞ *Alumin. Rup.* ʒiii. *coct. & Liquefact. add. Sang. Dracon.* ʒii. *extract. Thebaic.* ʒi. *m. pill. Maſſ. capt. gr.* xii. 4ta *quaque Hora tamdiu ſedes Liquefactæ fuerint.*

THESE

THESE Pills I have order'd with very great Succeſs; but this obſerve, that they are highly improper till after the Obſtructions are reſolv'd, and the Cauſe of the Diſeaſe intirely remov'd.

IN the mean time, let his Diet be on Meats that are thickening, and that may reſtore the Juices to a good Conſiſtence, and as ſpare as poſſible; for this I have often obſerved, that the looſe Stools would greatly increaſe about four or five Hours after a full Meal; that is, about the Time the Blood began to be charg'd with new Chyle; upon this account, the leſs he eats, the leſs will he fill the Veſſels, and, of conſequence, the leſs Danger will there be of the Flux's returning. Let his Drink be Claret, or Port Wine, burnt with a little Cinnamon, and a few red Roſe Leaves: As alſo the Hart's-horn Drink in little Quantities; for all large Draughts of any Liquids will certainly increaſe the Flux.

SECT. II.

Of the Cure of a Diabetes, or large Diſcharge of Urine.

BUT ſometimes it happens, that after we have brac'd the Inteſtinal Glands, reſtor'd their Springyneſs, and freed the Body from the Danger of a melting Looſeneſs, the ſame Juices turn upon the Kidneys, and, in large Quantities, are diſcharg'd by the Renal Glands. If the Flood of Urine thus ſecreted, is endued with a ſweetiſh Taſte, it is a ſtrong Indication, that all the Digeſtions of the Vaſcular Syſtem, as well as the Viſcera, are vitiated; and that the Chyle receives little Alteration from the Solids, under this languid State, more than what it had from the Impreſſions of the Stomach and Viſcera; for the Tone of the Solids that miniſter to the Circulation, that is, the Vaſcular Syſtem, ought ſo far to divide the Particles of Chyle before it come to the Kidneys for Secretion, as to eliminate the Salts, and deſtroy that ſweetiſh Taſte it obtain'd from a Mixture of the Bile, and Pancreatick Juice in the Inteſtines.

THERE-

THEREFORE a Diabetes argues a higher Perverſion of the Solids, than when a Flood of inſipid, taſteleſs Urine only is excern'd; therefore the Medicines that will cure a Diabetes, will alſo brace the Renal Glands, and reſtore the Vaſcular Syſtem, in order to cure a plentiful Diſcharge of taſtleſs inſipid Urine.

NOW as this Symptom, for ſo I ſhall term it in Conſumptions, proceeds from an over-relax'd State of the Solids, ſo I ſhall take care not only to relieve, but abſolutely cure this immoderate Diſcharge; for of all others it generally proves the moſt fatal, if, for any conſiderable Time, it continues præternaturally affected; I ſhall, therefore, endeavour to find out a Set of Medicines that may invigorate the Solids, reſtore the Renal Glands, and brace the Mechaniſm of the whole vaſcular Syſtem; and I know no Medicines more proper to encounter this Difficulty, than the following;

℞ *Flor. Roſar. Rub. M.* iß *Cortic. Granator* ʒß *infund. in Aq. Bullient.* ℔ß; *cui adde Spt.*

Spt. Vitriol. gtt. xx. *ſtent ſimul per Horas ſex poſtea Col.*

℞ *Colaturæ* ℥iii. *Syr. de Roſ. ſic.* ℥ß *Tinct. Cantharid. gtt.* xxx. *m. f. hauſt. Capt.* 4ta *quaque Hora ad* 3 *vices.*

It is true, by this Method of Proceeding, a Strangury unavoidably ſucceeds; but every Body knows how eaſily an anodyne camphorated Draught, and a plentiful drinking of the Almond Milk, will relieve that Symptom; therefore if a Strangury enſue upon his taking the Cantharides, let him take this Draught, and drink plentifully of the following Emulſion, and theſe will intirely relieve him.

℞ *Aq. Lact. Alex.* ℥iiß *Aq. Peon. C.* ℥i. *Spt. Nitr. Dulc. gtt.* xx. *Pulv. Camphor.* (*in Sachar. Albiſſim. tantil.*) *gr.* viii. *Syr. Papaver. erratic.* ℥vi. *m. f. Hauſt. Capt. quamprimum.*

℞ *Amig. Dulc. excortic.* ℥iß *Sem. Papav. Alb.* ℥vi. *Contund. quamoptimè in Mort. Marmor. Senſim. affund. Aq. Hord.* ℔iß;

cui

cui adde Aq. Cin. fort. ʒiv. *Syr. Balſam.* ʒi. *m. Emulſio.*

THESE Remedies I have experienc'd in a deſperate Diabetes, where, from the Greatneſs of the Diſcharge, a Cure was leaſt to be expected.

EVERY Body that underſtands any thing of the Structure and Mechaniſm of the Kidneys, muſt be ſenſible that their Fibres and Glands are endued with a peculiar Spring, that is capable of Contraction or Relaxation; when this Spring of the Renal Glands is too much contracted, as very often happens from a Stone in the Kidneys, we ought to uſe ſoftening, relaxing Medicines, in order to remove the over-great Tenſion the Glands and Fibres of theſe Bowels then ſuffer. But if their Tone happen to be too much relax'd, as always is the Caſe in a Diabetes, in which Diſeaſe the Renal Glands are, as it were, Palſical, then it calls for Remedies that may cloſe the Orifices of the too much relax'd Strainers; and by that means prevent an over-great Flood from running off this Way.

Way. Now thoſe Remedies will ſooneſt reſtore the Renal Glands, that are endued with a ſuitable Stimulus; and that Cantharides are endued with this Stimulus, and, conſequently, will brace the Renal Glands, is certain, for they never exert their ſtimulating Force before they arrive at the Kidneys and Bladder. By the Tincture of Cantharides, I mean my own Preparation, publiſh'd in my Treatiſe of the *Stone and Gravel.*

SECT. III.

Of Relieving the Colliquative Night-Sweats.

I NEED not aſſign any other Cauſe, why Conſumptive People ſo ſeldom meet with an abſolute Cure than, That, which I have, in the former Part, ſo evidently demonſtrated, is the Cauſe of the Symptoms; and that is, the Heart's not decaying in proportion to the other Parts; and before we can ever expect to gain any Ground in the Cure of the Diſeaſe, we muſt, in the firſt Place, endeavour either to leſſen the Force of the Heart's Motion, or, which is the

the ſame thing, increaſe the Strength or Springyneſs of the ſeveral Solids miniſtring to the cutaneous Diſcharges. And as this is an Evacuation the moſt conſiderable of any in the Body, and which daily weakens and undermines the Conſtitution, if greatly intended, ſo it will be our great Concern to prevent, as much as poſſible, a Ravage that may prove of ſuch dangerous Conſequence.

THE Palliation of this Symptom will be moſt effectually procur'd by Remedies that brace the cutaneous Glands, and reſtore their over-relax'd Spring; and amongſt all the Medicines, moſt proper for this Purpoſe, I know none that exerts that Force upon this Evacuation, or that produces more happy Effects, than the *Peruvian Bark*; if skilfully given. But this I muſt obſerve, that theſe clammy Sweats will certainly return, after they have receded, if we do not forthwith proceed to reſolve the Obſtructions, and cure the Conſumption: Nor is it poſſible, wholly to remove the Night-Sweats, till we have entirely cur'd the Diſeaſe; for the Cutaneous Glands, being

being fartheſt from the Centre of Motion, will have their Springs ſooneſt impair'd, and of conſequence, will give a Vent to thoſe Juices that can force a Diſcharge no where elſe.

In relieving theſe colliquative, clammy Sweats, it will be highly neceſſary, that we endeavour to diſpoſe the Fluids to a fine Breathing, which will be beſt effected by theſe Medicines, that attenuate the Fluids, and, by their fine genial Warmth, oblige the Glands, in ſome Meaſure, to contract or ſtraiten their Orifices.

℞ *Pulv. E. Chel. Canc. C.* ℈i. *Theriac. Androm. gr.* xii *Croc. Pulv. Sal. Succin. ana gr.* iv. *Caſtor. Ruſ. gr.* iii. *cum q. ſ. Syr. Garioph. m. Bol. Capt. omni Mane & Hora ſom. Superbib. Coch.* 6. *Julep ſequent.*

℞ *Aq. Lact. Alex. Aq. Limac. Magiſtral. ana* ℔ß. *Syr. Balſam.* ℥i. *m. f. Julep. Capt. Coch.* 6. *cum Bol. & in Languoribus.*

When, by the Uſe of theſe Medicines, we have attenuated the Blood, and reduc'd thoſe clammy

clammy cold Sweats to a fine warm Breathing, which I have more than once known to ſucceed, upon the foregoing Adminiſtrations; we may then proceed to brace the cutaneous Emunctories, reſtore their over-relax'd Springs, and, as much as poſſible, prevent thoſe Night-Sweats from being profuſe; for which ſeveral Purpoſes, the following Remedies are wonderfully Efficacious.

℞ *Conſerv. Cynosbat.* ʒvi. *Specier. Diatracaganth. fridg.* ʒß *Syr. Papaver. erratic.* ʒiiiß *m. f. Linct. Capt. Coch.* i. *ſubinde ſuperbib. Coch.* 6 *Julep. ſequent.*

℞ *Aq. Lact. Ceraſor. Nig. ana* ʒvi. *Aq. Limac. Magiſtral.* ʒiv. *Syr. Garioph.* ʒi. *Spt. Nitr.* ʒi. *m. f. Julep.*

Bibat ℔ß *Lact. Aſini, omni mane & hora* 4ta *Pomerid. cum Pulv. ſeq.*

℞ *Pulv. E. chel. & C. Margar. ppt. ana* ʒiß *Sach. Roſat.* ʒii. *m. in Chat.* 6 *divid.*

ALWAYS obſerving, that if any other Evacuation break out upon the Receſſion of

of that we are endeavouring to reſtore, we ought to have recourſe to the ſeveral Medicines, that are preſcrib'd in relieving that Diſcharge; for this I have often obſerv'd, that it is not only highly unſafe, but almoſt impoſſible, wholly to reduce the Evacuations to their natural Standard, before we have reſolv'd the Obſtructions of the Viſceta; and without effecting which, we can ſcarce ever expect an abſolute Cure of the Diſeaſe.

AFTER the Obſtructions of the Viſcera are reſolv'd, we may then proceed to the uſe of the *Cortex Peru*, which is the moſt Sovereign Remedy in the Univerſe, in reſtoring the Texture of the Solids; for it acts upon the Fibres, in the ſame Manner as Oak Bark does upon Hides; that is, it thickens the Coats of the Veſſels, and reſtores their Springs, whereby they act upon the Fluids with greater Vigour; but if any Obſtructions happen to be in the Way, it ties them up upon the Habit, and, by this means, creates all thoſe terrible Symptoms, many complain of, to whom this moſt excel-

excellent Remedy has been unskilfully administer'd.

℞ *Cortic. Peru.* ʒiß *Cochinel.* ʒiß. *Specier. Diamb. ſine od.* ʒi. *Coq. in Aq. Font.* ℔iß. *ad* ʒxii. *Col.*; *cui adde Aq. Limac. Magiſt.* ʒiv. *Syr. Papav. erratic.* ʒiiß *Spt. Nitr. Dulc.* ʒiß *m. Capt. Coch.* 6. 6ta. *quaque Hora.*

THIS Remedy I have always found the moſt Efficacious, after theſe cold clammy Sweats have been reduc'd to warm Breathings, and the Obſtructions of the Viſcera are remov'd, upon which the Fever, which before was continual, becomes intermitting.

SECT. IV.

Of Relieving the Cough and Hoarſeneſs.

UPON reducing the Evacuations to their natural Standard in Conſumptive Bodies, I have, in ſome Caſes, obſerv'd, that Nature, unable to force a Paſſage by any of the Diſcharges, has flung a vaſt Quantity of the ſuperfluous Juices upon the Reſpira-

tory Organs, and detach'd it off by the Bronchial Glands, in Form of a thick, viſcid Phlegm, or ſometimes a more ſerous Matter, which excites a Cough very diſturbing, eſpecially towards the Evenings, at which Time it greatly perplexes him; and this is the Reaſon why I would adviſe thoſe that attend the Patient, to be highly cautious how they proceed too early to ſuppreſs the ſeveral Diſcharges; for the ſuperfluous Humours will either burſt out at ſome of the Evacuations already ſuppreſs'd, or paſs off by the Lungs, and excite a Cough, or Spitting, or Vomiting of Blood; or retreat upon the Habit, and exaſperate the Hectic Fever: In ſhort, till the Obſtructions are reſolv'd, ſome way or other they muſt have a Vent, or they will endanger the Conſtitution.

THE Indications of Cure therefore, will be vaſtly different, in different Habits of Body, which, again, will vary much, according to the different Matter expectorated. If the Phlegm, ſpit up, be thin and ſerous we muſt endeavour to thicken it; if thick and viſcid, to thin it. To anſwer the firſt Intention, therefore, and give the Juices a greater

greater Consistence, it will be proper to exhibit those Remedies that abate the Motion, incrassate the Phlegm, and relieve the Cough.

IN this Case, I should prefer a good large Blister applied between the Shoulders, to any other Remedies whatever, which will stimulate the Bronchial Glands, and, by that means, restore their contractile Powers, and, consequently, relieve the Cough; and to abate the intended Motion of the Juices, and thicken the Phlegm, the following Linctus and Julep will prove very Efficacious.

℞ *Syrup. Papaver. erratic.* ℥iv. *Conserv. Cynosbat.* ℥ß. *Specier. Diatrcaganth. frig.* ℥vi. *Marg. ppt.* ʒiii. *Balsam. Peru. gtt.* xii. *m. exactissimè & fiat Linctus Capt. Coch. freq. urg. Tussi.* Vel,

℞ *Vitell. ovi* i. *dissolv. in Vin. Canar.* ℔ß; *cui adde ol. Cin. Chim. extract. gtt.* viii. *Syr. Croc. in Vin. Canar. fact.* ℥i. *m. f. Julep. Capt. Coch.* ii. 6ta. *quaque Hora.*

℞ *Pillul. de Styrac. gr.* vii. *ad. gr.* x. *Sal. vol. C. C. gr.* iv. *m. Pillul.* 3. *Hora ſomni ſumend.*

If, upon the ceaſing of the Cough, ſevere pungent Pains affect the Side, and the Breath grows ſhort, let him bleed eight Ounces, after which the following will give admirable Relief.

℞ *Ol. Lin. ſine igne extract.* ℥ii. *Syrup. de Praſio Syr. Alth. ana* ℥i. *flor. Sulph.* ℥iß *Sachar. Albiſſ.* ℥iii. *m. f. Linct. Capt. Coch.* i. 6ta *quaq; Hora ſuperbib.* ℥iv. *ſequent.*

℞ *Decoct. Pectoral.* ℔iß *Syr. Alth. Capillor. Ven. ana* ℥ß *Aq. Limac. Magiſt.* ℥vi. *m. Apozema.*

But in Caſe the Returns of the Cough be ſlow, and the Phlegm expectorated very thick and viſcid; in this Caſe, we muſt abſtain, as much as poſſible, from Opiates, and the Streſs of the Cure muſt depend entirely upon inciding Medicines; and ſuch a

as may diſſolve and attenuate the over-craſs Phlegm, and bring it to a freer Expectoration.

℞ *Syr. e ſuc. Limon. Syr Cydon. ana* ʒi *ol. Amigd. Dulc.* ʒii. *flor. Sulph.* ʒiß *Croc. Pulv.* ∋ß *Sachar.* ʒii. *m. f. Lynct. Capt. Cochlear.* i. *frequenter urgente Tuſſi. ſuperbib. Coch.* 6 *ſequent.*

℞ *Decoct. Pectoral.* ℔i. *Aq. Theriac.* ʒiv. *Syr. Alth.* ʒi *Spt. Salis Volat. Armoniac. gtt.* 60 *m. f. Apozema.*

BUT if the Toughneſs, the Thickneſs and Viſcidity of the Phlegm demand Medicines of a more inciding Nature, let him have the following Adminiſtrations.

Applic. Emplaſt. Epiſpaſtic. amplum & Acre Nuchæ.

℞ *Syr. de Praſio.* ʒiß. *Oximel. Scillitic.* ʒß *ol. Amigd. Dulc.* ʒii *Croc. Pulv.* ∋ß. *Sach.* ʒii *m. Linct. Capt. Coch.* i. 4ta *quaque Hora ſuperbib. Coch.* 6. *ſequent.*

℞ *Heder. Terreſt. M.* iß *Rad. Glycerriz. Enul. Camp. ana* ʒiß *Fic. Ping. Vuar. Paſſul. ana* ʒii. *Hord. Gal. M.* ß. *coquant. ſimul in Aq. Font.* ℔ii *ad* ℔iß. *Col.*; *cui adde Aq. Theriac.* ʒvi. *Syr. Balſ.* ʒiß *m. f. Apozema Capt. Hauſt. cum Linct. & freq. durante Difficultate Tuſſiendi.*

If, through the Violence of the Cough, and the continual Wakefulneſs of the Patient, Opiates be judg'd abſolutely neceſſary, let him take them in the following Manner.

℞ *Pill. Math. gr.* x. *Pillul. Ruffi gr.* xii. *Sal. C. C. gr.* iv. *m. in Pillul.* 3. *Hora ſom. ſumend.*

Tho' I muſt confeſs I am often greatly afraid to give Opiates in Conſumptive Caſes, eſpecially where the Stomach and Lungs are greatly burthen'd with a thick, heavy, viſcid Phlegm; for theſe kind of Medicines do but retard the Secretions, and render the Phlegmatic Humours more viſcid; and therefore in ſome extraordinary Caſes, where

Opiates

Opiates are liable to affect the Brain, and the Conſumption is only *in fieri*, I have ventur'd to take away eight Ounces of Blood, after which I have preſcrib'd the following with happy Succeſs.

℞ *Sal. Vol. Armoniac. gr.* vi. *extract. Thebaic. gr.* iß *Croc. Pulv. gr.* iv. *Balſ. Peru. q. ſ. m. Pillul.* 3. *Hora ſomni ſunend. ſuperbib. Hauſt. ſequent.*

℞ *Aq. Lact.* ʒiß. *Aq. Theriac.* ʒß. *Spt. Nitr. Dulc. gutt.* xx. *Syr. Limon.* ʒvi *m. f. Hauſt.*

IF the Cough continue ſtill to affect him, let two large Iſſues be made on each ſide the Neck, above the Scapula's, which will greatly relieve this tormenting Symptom.

SECT. V.

Of Relieving the Spitting of Blood detach'd from the Bronchial Veſſels.

IT ſometimes happens, that a Spitting or Vomiting of Blood, not only precedes a Decay, but is a Concomitant of the Diſeaſe itſelf, under all its ſubſequent Durations; which, as I above obſerv'd, proceeds not ſo much, as is generally ſuppos'd, from any ſharp, acid Lymph in the Blood, as from the mere Laws of Circulation; for, in Conſumptive Habits, the Coats of the Veins and Arteries, that furniſh the Lungs and Stomach with Blood, being extremely thin, are unable to make Reſiſtance to the Force of the Blood coming from the Heart with greater Impulſe; ſo that ſometimes a Rupture enſues, which greatly diſpirits the Patient, becauſe the Evacuation is immediately diſcharg'd from the Blood, the Fountain of Life.

LET the Patient, in this Caſe, as ſoon as ever the Hemorrhage appears, be conducted to Bed, and, as much as poſſible, compos'd

to

to Reſt. Let him ſpeak little, and ſtir leſs.

To make a Revulſion, Bleeding in either Arm, will be highly proper, eſpecially if done in the beginning, before the Hemorrhage has expended too much Blood; after which let him take the following.

℞ *Conſerv. Roſar. Rub.* ʒiß *Specier. Diatragacanth. frig.* ʒvi. *Gum. Arabic. Sang. Dracon. ana* ʒiß *Terr. Japon. Coral. Rub. ppt. ana* ʒi. *Spt. Vitriol. gtt.* xii. *Syr. e Suc. Plantag. q. ſ. m. f. Elect. Capt. Quantitat. Nuc. Caſtan.* ʒ[a]. *quaque Hora ſuperbib. Coch. 6 ſequent.*

℞ *Tinct. Roſar. cum Spt. Vitriol. fact.* ℔ß *Syr. de Roſ. ſic.* ʒiß *m. f. Julep.*

℞ *Aq. Lact.* ʒiß *Phleg. Vitriol.* ʒß *Syr. e. Mecon.* ʒi. *Spt. Nitr. Dulc. gtt.* xx. *m. f. Hauſt. Capt. Hora ſomni.*

℞ *Sem. Papav. Alb.* ʒvi. *Sem. Cucum. Hortenſ.* ʒii. *Amig. Dulc. excort. n°.* xii. *Contund. quamoptimè in Mort. Marmor.*

ſenſim

ſenſim affund. Aq. Papaver. Rhead. ℔iß *Aq. Cin. Hord.* ʒvi. *Alum. Rup. puriſſimi* ʒi. *Syr. Balſam.* ʒiß *m. Apozema bibat frequent.* Vel,

℞ *Decoct. Alb.* ℔iß. *Phleg. Vitriol.* ʒiß *Syr. de Symph.* ʒii. *m. Apozema.*

℞ *Conſerv. Cynosbat.* ʒiß *Pulv. Haly* ʒß *Sem. Hyoſciam. Coral. Rub. ana* ʒiß *Syr. e. Suc. Plantag. q. ſ. m. f. Elect. Capt. Quant. Nuc. Jugland.* 4ta *quaque Hora ſuperbib. alicujus Julep. Coch.* 4.

DURING the Continuance of the Spitting of Blood, it would be highly neceſſary, that he keep to an extremely ſparing Diet; as alſo that he refrain all Exerciſe, and drink the Aſs's-Milk Night and Morning with the following Powders, to allay the over-intended Motion of the Blood.

℞ *Coral. Rub. ppt. Margarit. ppt. Salis Prunel. ana* ʒi *Sach. Roſar.* ʒiß *m. Pulv. in 6 Chartul. divid. Capt.* i. *mane que Nocte ſuperbib.* ℔ß *Lact. Aſini.*

SECT.

SECT. VI.

Of the Cure of Gleets not Venereal.

THESE being ſimple Iſſues, ariſing from a Laxity of the Glands of the Urethra, by over-ſtraining the Parts miniſtering to Generation; the Cure will conſiſt in reſtoring the Tone of the Part principally affected, in bracing the Glands of the Urethra, and thereby preventing the exceſſive Diſcharges of the Gleet, which, if ſuffer'd to continue, often brings on thoſe draining Weakneſſes, that ſtand by him the longeſt Day he has to live.

THE Cure will chiefly conſiſt in thoſe Medicines that brace the Fibres and reſtore the Spring of the Glands that line the Internal Surface of the Urethra: And becauſe on any weaken'd Part there generally ſettles a Flux of Juices, I ſhall propoſe the following Purge, as the propereſt to precede all other Adminiſtrations.

℞ *Calomel. gr.* xii. *ad* ℈i. *ol. Cin. gtt.* i. *Conſerv. Roſar. q. ſ. m. f. Bol. hora ſomni ſumendus.* ℞ *Mann.*

℞ *Mann. opt.* ʒiß *dif. in Aq. Epſom.* ʒvi. *Col. Capt. Mane ſequent. ſuperbib.* ℔iß *ejus dem. parum coct.*

But as it is impoſſible to cure this Diſeaſe, without topical Applications, ſo I prefer the following Injection to all I have hitherto met with in Practice.

℞ *Aq. Calc.* ℔ß *Trochiſ. Alb. Rhaſ.* ʒß *Mercur. Alb. Sublimat.* ℈i. *m. Injectio; Urethræ injiciend. cum Syphone.*

This moſt aſſuredly takes away all Gleety Matter and dripping of the Yard, by bracing the Glands of the Urethra, and reſtoring their over-relax'd Springs to their priſtine Vigour.

But ſometimes it ſo happens, that after we have reſtor'd the Glands of the Urethra, exceſſive ſeminal Evacuations ſhall continue greatly to weaken the Patient, and perplex him above meaſure: In this Caſe, to reſtrain theſe Seminal Diſcharges, the following will prove moſt admirable Remedies;

medies; which alſo have a very great Influence in ſuppreſſing thoſe irregular Diſcharges of the Whites in Women, to whom I have order'd them with great Succeſs.

℞ *Pulv. Maſtic. Succin. Alb. ppt. Sang. Dracon. Sachar. Satur. ana* ʒi *Terebinth. E. Chyo* ʒß. *m. pill. Mediocres Capt. quatuor Hora ſomni & primò Mane ſuperbib. Coch.* 6 *Julep. ſequent.*

℞ *Aq. Calc. Aq. Cin. Hord. ana* ʒiv. *Aq. Peon. C.* ʒii. *Sach. perlat.* ʒiv. *Spt. Nitr. Dulc.* ʒi. *m. Julep.*

IF the Diſcharges of the Seminal Matter be exceſſive, let his Diet be very ſparing, only in Caſe of Faintneſs, allow him a Glaſs or two of generous Wine, to keep up his Spirits; and every Night let him bathe the Region of the Parts affected, with the following Lotion.

℞ *Aq. Germin. Querc.* ℔ß *Vitriol. Alb. diſ. Sachar. Saturni ana* ʒß *m. Lotio. Part. affect. applicand.*

AND

AND to ſtrengthen and reſtore the Tone of the impair'd Muſcles of the Back and Loins, let him apply the following Plaiſter or Cataplaſm.

℞ *Alb. Ovor.* iv. *Sang. Dracon. in Sublitiſſim. Pulv. redact. Bol. ver. ana q. ſ. m. ut fiat Cataplaſma Lumbis applicandum.*

LET the Patient now and then uſe the Cold Bath; and theſe Meaſures will effectually reſtore him.

CHAP. V.

Of the Cure of Decays, Waſtes and Conſumptions in general.

No poſſibility of relieving the Hectic Fever, without firſt reſolving the Obſtructions.

I SHOULD now proceed to relieve the Hectic Fever; but, That, ſo immediately depends on the Obſtructions of the Bowels and other Organs, that, without re-

relieving the latter, I ſee not how it is poſſible to give any conſiderable Turn to the former; as I have abundantly experienc'd in ſeveral Caſes of Decays; and this is one great Reaſon, why the Fever is ſo difficult to remove, and why it eludes the Force of the moſt generous Medicines preſcrib'd in ſuch Caſes. I ſhall, therefore, in order to relieve the Fever, examin the ſeveral general Indications, moſt proper to cure the Diſeaſe, that is, to reſolve the Obſtructions, that attack the ſeveral Bowels; for that Point once effected, the Circulation will be freer, the Plethora will vaniſh, the Hectic Fever will ceaſe, and a ſmall Aſſiſtance given to the Solids will reſtore their over-relax'd Tone, and, conſequently, reduce the Conſtitution to its priſtin Vigour.

FROM relieving the Symptoms that affect the ſeveral Evacuations in Decays, Waſtes and Conſumptions; proceed we, therefore, in the next Place, to conſider the general Indications moſt proper to cure the Diſeaſe, that is, to give an abſolute Freedom to the ſeveral Organs of the Body labouring under Conſumptions, and that is intirely to free

free the Circulation of the Blood from all manner of Obſtructions. Now the beſt way, to know how to relieve the Body of theſe Obſtructions will be, in the firſt Place, to conſider how they came firſt to form themſelves upon the Habit, and, on a nice Enquiry, we ſhall perceive, that they could receive their faſtening from nothing but the Particles of the Fluids going into too cloſe Contacts on the Depreſſion of the Solids beneath their natural Standard, upon which theſe combin'd Particles of the Blood ſtagnate in the ſmalleſt Glands and Arteries, and, conſequently, generate Obſtructions, which excite all thoſe Phenomena's of Plethora, Hectic Fever, Fluxes, Cough, Pain and that Emaciation of the Body, that never fails to attend Conſumptions, when once they have taken any hold of the Conſtitution.

Now the Method moſt proper to be taken, in order to remove theſe ſeveral Cauſes, will ariſe, in the firſt Place, from reducing the Obſtructions into a Condition of being more eaſily reſolv'd; and the propereſt Method to effect this, will be by relieving the

the Fibres of the ſeveral Parts, that too cloſely embrace the obſtructing Matter; upon which an eaſier Impulſe will diſlodge it from the Veſſels it poſſeſſes; for if we immediately proceed to reſolve the Obſtructions (by Medicines that increaſe the *Momentum* of the Blood) before we previouſly prepare the Matter for a Diſſolution, we ſhall but increaſe the Tenſion of the Veſſels, and very badly put the Patient to Pain and Torture, without gaining any conſiderable Advantage.

To make this a little more clear, I muſt beg leave to obſerve, that if we would oblige a Particle of Matter to paſs a Tube or Veſſel, naturally too ſmall for its Admiſſion, we muſt either leſſen the Dimenſions of the Particle, or enlarge the Cavity of the Veſſel: to leſſen the Particle of Matter, is to divide or break its Coheſions, which will not always be poſſible in Conſumptions, eſpecially thoſe attended with Schirrous Swellings of the Liver, Spleen, &c. therefore, the moſt eaſy and ſucceſsful way in Conſumptive Habits, will be

to enlarge the Veſſel, whereby the Matter may paſs with a leſſer Force or Reſiſtance.

THIS Method of preparing or diſpoſing the obſtructing Matter for a more eaſy Diſcharge, is certainly the moſt regular and ſafe Way, that we can take in Decays, Waſtes, and Conſumptions; it's true, indeed, the Ancients mention the preparing the Humours for Evacuation, and their Method of preparing the Juices, generally preceded their purging Medicines, and was given two or three Days before; but what I mean by it here, is to diſpoſe the Matter that lies impacted in the ſmalleſt Glands and Arteries of any Part, to a freer Motion and Circulation.

NOW, the Matter, that compoſes theſe Obſtructions, is more or leſs eaſily put into Motion, and, conſequently, changes its Seat from a greater or leſſer Impulſe, according as it is more or leſs firmly embrac'd by the Fibres, and, conſequently, rivete on the Part affected. This appears very plain, from Inſtances innumerable in Mechanicks, eſpecially thoſe moſt familiar con-

cernin

cerning the relieving of ſharp-pointed Bodies driven into any Subſtance, by the Laws of Percuſſion. A Nail ſtruck a little way into a Board, will require but a little Force to unrivet it; but if driven to the Head, the Impetus muſt be conſiderable, that will diſingage it from its faſtening.

The Neceſſity of preparing the Matter, before we proceed to reſolve the Obſtructions.

ANY Body, in the leaſt acquainted with the Mechanic Principles, will eaſily underſtand the Reaſon of this Application: That Obſtructions, in Veſſels relax'd, by a previous Preparation of the obſtructing Matter, will require a leſſer Force to diſingage them, than what will be neceſſary to unrivet the ſame Obſtructions unprepar'd; and, conſequently, that the Obſtructions prepar'd, will be in the ſame State with the Nail ſtruck a little way into the Board, while thoſe unprepar'd, will be liable to the ſame Inconveniencies with the Nail driven up to the Head, and, conſequently, will require a greater Force to unrivet them.

IF you too early apply Medicines of a deobſtruent Nature, or ſuch as will increaſe the Force or *Momentum* of the Blood, as

Steel, and moſt Preparations of Mercury will do; you will perceive, that the Obſtructions will, but with great Difficulty, give way; and much of that Heat, Hurry and Confuſion that attend the Conflict, might be prevented in the Cure of moſt Chronic Diſeaſes, if we would but adminiſter ſoftening Balſamic Medicines, before we proceed ro reſolve the Obſtructions. Theſe will ſoften the impacted Matter, and relieve theVeſſels, that too ſtrongly embrace it, whereupon a much leſſer After-force will reſolve it.

To make this a little more plain, we may obſerve in wandering Pains that affect the Breaſt, Legs and Arms of decaying Conſtitutions, and which ariſe from Obſtructions faſten'd on the Habit; that theſe Sort of Pains yield to no kind of Remedies ſo readily, as thoſe endu'd with ſoftening relaxing Properties; as may be obſerv'd in paſſing off of little Stones from the Kidneys That thoſe little Stones ariſe from a Relaxation of the Veſſels that compoſe the Renal Glands, is certain; and yet they often put the Patient to great and inconceivable

Tortur

Torture, from that Tenſion they make upon the Veſſels of the Parts affected; and the beſt Way to relieve thoſe Parts, and give an entire Paſſage to the Stone, is, by adminiſtering ſoftening, emollient and lubricating Medicines that may relieve the Paſſages.

THE Reaſon why I have ſo ſtrenuouſly inſiſted on preparing the obſtructed Matter, is, becauſe of the great Heat, Fever and Throbbing Pains I have often perceived to attend the Adminiſtration of Chalybeat Remedies, when they have been given before the Matter was previouſly diſpos'd for Expulſion.

HITHERTO I have conſider'd the moſt proper Method, in order to looſen the Matter impacted upon the Habit, and prepare the Obſtructions for a more eaſy Diſſolution. The reſolving the Obſtructions upon theſe Grounds and Principles, and with this previous Preparation, will be attended with all the Succeſs and Safety imaginable; for a little Force now communicated to the Blood, will eaſily diſin-

gage the obſtructed Matter already looſen'd, by, aforehand, relaxing the Veſſels where it reſides.

How to judge of the Intentions of Nature.

THE Phyſician, therefore, in the Application of a Force neceſſary to increaſe the *Momentum* of the Blood, to a Degree capable of reſolving the Obſtructions, ſhould be highly careful to conſider, that he always has the Endeavours of Nature working on his Side, and that, therefore, in beginning Conſumptions, he ſhould not employ a Force greater than may fall in with the Intentions of Nature. If it ſhould be ask'd, how we ſhall judge of the Intentions of Nature? I anſwer, by the Strength of the Conſtitution, as alſo by the Beating of the Pulſe, and the many good Symptoms that generally attend beginning Conſumptions. Beſides, we may always venture to increaſe the Doſe of a Medicine, when we cannot ſo well manage an over-large Doſe already given; and which can ſerve to no other Purpoſe, than to heighten the Cough, Fever and Pain, by too much increaſing the Motion of the Blood, and, con-

conſequently, all the Secretions dependant on that Motion.

IT will, therefore, be highly proper to conſider the Force neceſſary to be communicated to the Blood, and the Manner of its Communication, which muſt greatly vary, according to the different Conſtitution of the Patient, the different Degrees of the Diſeaſe, and the different Advances it has made. In the beginning of Decays, as the Principles of the Blood are but tending to Coheſions, and the Obſtructions are ſcarce form'd in any principal Bowel or Organ; ſo I think a ſmall *Momentum* communicated to the Fluids, from a Stimulus added to the Solids, will be ſufficient to diſingage any Obſtructions that can ariſe on this Head.

IN Caſes of this Nature, I ſhould prefer fix'd Salts, aromatic Gums and Balſams, as alſo volatile Salts, to all other Medicines; becauſe theſe will exert a Force great enough to reſolve the Obſtructions in beginning Conſumptions, and when the Glands are only reſtive, and want ſcouring.

BUT in Decays or Conſumptions of longer ſtanding, and where the Obſtructions, Tubercles, or ſchirrous Swellings, are ſtrongly wedg'd upon the Habit, we muſt endeavour to increaſe the Blood's Weight, as well as Motion; to which end, excellently well, ſerve all Mineral Preparations, eſpecially thoſe of Steel and Mercury. Theſe break the Coheſions, and præternatural Attractions of the Juices, increaſe the Separations and Secretions of the Fluids, reſolve the Obſtructions, and, conſequently, cure the Diſeaſe, by adding a Weight to the Blood's Motion increas'd, whereby it falls with a great Impetus upon the Obſtructions, and ſtrikes the impacted Matter into the Maſs, once more, to take its Fate among the circulating Fluids.

THEREFORE, in all Caſes, where the Obſtructions are ſo faſt wedg'd upon the Conſtitution of any Viſcus or Organ, as that they will not give Way, to the Efforts or Endeavours of Nature, nor to a Force communicated to the Blood, from a Stimu-

lus

lus added to the Solids; there we muſt endeavour to accompliſh the Ends of Cure, from Medicines that may increaſe the Weight of the Blood, that its Weight and Motion being driven with united Force upon the obſtructed Parts, might not fail of diſingaging the Obſtructions capable of being reſolv'd, and, conſequently, of curing the Diſeaſe capable of a Cure.

How to diſcover when the Obſtructions of the Viſcera are throughly reſolv'd.

BUT here a Queſtion may very ſeaſonably be ask'd, *viz.* By what Marks, Signs or Tokens ſhall we certainly diſcover, when the Obſtructions, in Conſumptions, are throughly reſolv'd, and the impacted Matter unwedg'd from the Parts, and diſcharg'd the Body? To this I anſwer, That we ſhall eaſily diſcover when theſe ſeveral Points are effected; for as the Obſtructions give Way, the Plethora will ceaſe, the Fever will vaniſh or intermit, from a Laxity of the Veſſels only remaining, and the Cough and Pains will greatly recede; for as the Fever depends upon the Plethora, and the Plethora upon the Obſtructions, ſo upon the Reſolution of the Obſtructions, the Heart will beat regular, and the Circulation will become

come freer; upon which the Fever will want a Support. Theſe are the Signs, Marks and Tokens that will attend the Reſolution of the Obſtructions, and their Diſcharge; for it's impoſſible to take away the Cauſes, but that the Effects will ceaſe; that is, upon the Removal of the obſtructed Matter, the Diſeaſe will vaniſh.

THE Preparation and Reſolution of the Obſtructions being effected, and the Matter turn'd into the Blood, it will be highly neceſſary that we immediately proceed to free the Conſtitution from ſo unfriendly a Gueſt; for if we only reſolve the Obſtructions, and leave the Matter in the Blood, it will only diſingage from one Organ or Bowel, in order to ſettle upon another, or, after a few Circulations, perhaps, take up with the ſame Neſt; as often is the Caſe of theſe wandering Pains attending the Rheumatiſm, the Scurvy and Gout, that fly from Part to Part, from Bone to Bone, and at laſt ſettle upon ſome principal Organ: becauſe the Matter was not diſcharg'd the Body upon the Reſolution of the Obſtructions.

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As the Obſtructions, therefore, recede, we muſt endeavour to diſcharge the ſuperfluous Juices from the Habit; and the propereſt way to effect their Diſcharge, will be from Medicines that evacuate by Vomit, Stool, and ſenſible Perſpiration, that is, by Sweat; the particular Application of which, ſhall be the Subject of the following Chapter.

BUT ſometimes it is not poſſible to diſcharge the obſtructed Matter, by any of the Common-Shores of Nature. In this Caſe, it will be moſt eligible to lodge it, if poſſible, on the Surface of the Body. This is a ſafe Way of curing Decays, and often in the beginning is attended with Succeſs: for while the Obſtructions of the Organs and Bowels are recent, they will eaſily give Way to good antiſcorbutic Medicines, aſſiſted with the Endeavours of Nature, whereby they will force the obſtructing Matter from the internal Organs, to the external Surface of the Skin, that is, they will ſtrike the Diſeaſe from the Centre to the Circumference.

Now

Now when the Matter, according to the Laws of Motion, is determin'd to the Surface of the Body, if the Solids are not much impair'd, they will prevent its Particles from running into too close Contacts, and, consequently, it will appear upon the Habit in the Form of Cuticular Eruptions; but if the vascular System suffer any extraordinary Impairation, then the Fluids will move slower, their Attractions will be stronger, and of consequence, excite those Blotches, Bumps and Blains, that emboss the Legs, Arms and several Parts of the Habit. This is what we call the striking out of the Humours, and is always a good Sign, because it removes the Obstructions from the inward to the outward Parts of the Body.

As soon, therefore, as we have reduc'd the Fluids to a just Ballance, by those Medicines that evacuate the superfluous Humours from the Blood and first Passages; we may then proceed safely to restore the Springyness of the Fibres, to brace the whole vascular System, and invigorate the Animal Constitution in every Part; and of all the Me-

Medicines that ſerve this Intention, I know none preferable to the *Jeſuit's Bark*; and if any ill Conſequences follow from its Adminiſtration, it is a ſtrong Preſumption that it is wrong applied.

IT is a Medicine in reſtoring the Conſtitution after great Fevers, or other dangerous Illneſſes, ſecond to none, eſpecially if join'd with ſome powerful Diureticks, that may ſcour the Glands, and take off from their Reſtiveneſs, which, by this means, will reſtore the Blood to a freer Circulation. And in Caſes where the Obſtructions are recent, it often does the work itſelf, without any other Aſſiſtance. It reſtores the Fibres of the Blood-Veſſels, thickens their Coats, and acts upon the Solids in the ſame manner, as Oak Bark does upon green Hides, in order to convert them into Leather; and by this means it becomes ſo powerful in Hemorrhages, and all manner of Fluxes, by giving a new Spring and Vigour to the whole vaſcular Syſtem. But, then, if we give it in any Quantities, before the Obſtructions are reſolv'd, and the ſuperfluous Juices are diſcharg'd the Body, it will aſſuredly

aſſuredly wedge the obſtructing Matter upon the Habit, and, by contracting the Orifices of the Glands and ſmalleſt Fibres, put the ſeveral Parts to a greater Tenſion, and excite ſevere acute Rheumatic Pains, and all other Symptoms that attend Obſtructions, which are the certain Conſequences whenever this excellent Remedy is unskilfully given.

THUS far I have proceeded to examine into the general Indications of Cure attending Conſumptions: I ſhall, in the following Chapters, endeavour to apply theſe general Rules to the particular Stages, in the Cure of this Diſeaſe.

CHAP. VI.

Of the Cure of Decays, Waſtes and Conſumptions, in their firſt Stage, attended with a ſlow, erratic Fever.

HAVING thus far proceeded to lay before the Reader the general curative Indications moſt proper to relieve the Diſeaſe; I ſhall now go on to conſider the particular Application of thoſe general Rules to the ſeveral Stages of Decays, Waſtes and Conſumptions.

THE Phyſician, therefore, when he goes upon the Cure of Conſumptions, ought to be highly careful that he duly weigh all the preſent impending Circumſtances of the Patient, the Degrees of the Decay, and the Advances it has made; and if upon a careful Enquiry into the Nature of the Diſeaſe, and Symptoms attending, he perceive the

the Diſeaſe is only a beginning, his Task will be the leſs difficult; for nothing is more eaſy, than to relieve a beginning Conſumption; nothing more hard than to cure a confirm'd one.

It is a common Saying in moſt Diſeaſes, Relieve the Symptoms, and the Diſeaſe will vaniſh; but though this Maxim generally holds good in moſt acute Diſeaſes, yet is it impoſſible, abſolutely to relieve the Symptoms under Conſumptions, without firſt curing the Diſeaſe, becauſe, as I have obſerv'd in the former Part of this Diſcourſe, the Symptoms are dependant on the Diſeaſe, that is, on the Obſtructions that form the Diſeaſe; and which Symptoms riſe or fall according as the Diſeaſe is more or leſs intended or remitted; ſo that all I intend in the preceding Chapters, where I treat of the moſt proper Methods for relieving the Symptoms, is only to abate their Violence, that they may not interfere, while our main Endeavours are employ'd, in order to reſolve the Obſtructions; that is, to cure the Diſeaſe.

BUT to confirm this Point more clearly, I have obſerv'd, in ſome Caſes of Conſumptions, that the Body would not receive its Nouriſhment upon the Receſſion of all the Symptoms, and the Reaſon was, becauſe the Obſtructions of the ſeveral Viſcera, the Grounds of the Diſeaſe, and Cauſe of the Symptoms, ſtill continu'd, and till which were entirely remov'd, it would be impoſſible to reſtore the Conſtitution, or give any conſiderable Turn to the Diſeaſe.

IN the firſt Place, therefore, let him make Choice of a fine, clear Air; a light, thin, ſpare Diet, and ſuch as, in its Digeſtion, may lay the leaſt Streſs upon the Solids. On this Occaſion, I ſhould prefer the Aſs's-Milk before any other, as alſo the Juice of Turneps, for theſe thin, ſoftening Liquors, greatly attenuate the ſtagnant Juices, and give Nature time to open the Obſtructions.

IF, by Uſe and Cuſtom, he has ſo habituated himſelf to Tea, as that he cannot well be without it, let him every Morning

indulge his Stomach with two or three Diſhes, prepar'd after the following Manner.

TAKE the Yolk of a new-laid Egg, and beat it up very well, with three or four Spoonfuls of Cream, to which add three Drops of Oil of Cinnamon. This is a moſt ſovereign Balſam; and one or two Spoonfuls in every Diſh of Tea, will render it the moſt Reſtorative of any thing in the World. I drank this Mixture myſelf in Tea, about five Years ago, and found great Relief, notwithſtanding I was then attended with all the Symptoms of an inward Decay.

HAVING carefully perus'd all the concurring Symptoms; if a Nauſea affect the Patient, it is a certain Indication, that there is Phlegm in the Stomach, and if Phlegm be in the Stomach, it will call for the Aſſiſtance of Emeticks to disburthen this Bowel of that Charge.

I KNOW ſome Authors mention Bleeding as moſt neceſſary to precede all other Operations; but I muſt confeſs, I never yet could

could discover the Reasons, on which these Gentlemen ground the Necessity of this Administration; for what Effects taking away of Blood, the Fountain of Life, can have on the Constitution, more than greatly to relax the System of the Solids already over-relax'd, and, consequently, increase the attracting Principle of the Blood already too much increas'd, I am unable to determine; therefore, unless extreme acute Pains affect the Breast, or extreme difficult Breathing the Lungs, I should rather choose to pretermit this Operation, which in consumptive Habits, is, at least, precarious, and chuse to begin the Cure, by the Administration of gentle Vomits; Medicines that give the most considerable Turn in this Disease; and which are inferior to none in Beginning Consumptions: This not only acts as an Evacuant, in disburthening the Stomach and first Passages, of that Load of Phlegm that destroys the Appetite, and creates an Aversion for Meats; but as a Stimulus, assists, in resolving the Obstructions and restoring the Machinulæ of the Fibres that compose the Coats of the Stomach, to their just Tone and Vigour; besides, as there are so

many Communications between the Stomach and Blood, ſo we may eaſily disburthen the Maſs of what Quantity of Juices we pleaſe, without the leaſt Damage to the Conſtitution, and while little paſſes by Stool, the Inteſtinal Glands will have time to reſtore their Springs, and conſequently, prevent the Return of the Colliquative Diarrhea, ſo melting to the Conſtitution, during the Decay.

THE Vomits I would recommend to Uſe are only *Ol. in Aq. Tepid. commixt. Oximel. Scillitic. Vin. Benedict. Ipecacoanha*, and no others.

WHEN you have work'd the Vomit to what Degree you think proper, let the Patient immediately deſiſt from drinking any thing that may increaſe his Reachings, and if he continue to bray, or incline to faint, chear his Spirits with a Glaſs of ſome generous Cordial, and let him be immediately convey'd to Bed; that being the beſt Place under thoſe violent Spaſms that often affect the Stomach, after the Operation of the Vomit is over. Thus being a little quieted

quieted in his Stomach, let him take the following Draught.

℞ *Aq. Caraſ. Nig.* ʒiß. *Tinct. Croc. in Vin. Can. fact.* ʒvi. *Spt. Nitr. Dulc. gtt.* xx. *Sal. Tart.* ℈i. *Syr. è Mecon.* ʒi. *m. f. Hauſt.*

THIS Draught I always obſerve, well to ſucceed in Decays, after a Vomit; for the Salt of Tartar is an admirable Stomachick, and by its ſtimulating Powers, helps to diſlodge any little Portions of Phlegm that may lie impacted in the Folds of the Stomach, and not give Way to the Operation of a Vomit.

ON the contrary, purging Medicines are but ſparingly to be us'd; becauſe they, in conſumptive Habits, too much diſtreſs the Strength; and as this Diſcharge is frequently made from the Blood, as well as Stomach, and firſt Paſſages; ſo they give a helping Hand to its Increaſe; beſides, this Diſcharge in the Progreſs of the Diſeaſe, is apt enough to be intended, and, conſequently, rather needs a Curb than a Stimulus, and, therefore, I ſeldom adviſe any

Purging Medicines in Conſumptions, but what has toaſted Rhubarb for their Baſis.

℞ *Rhabarb. inciſ.* ʒi. *Macis Nuc. Moſchat. ana* ʒß *Sal. Tart.* ϑi. *infund. in Vin. Alb.* ℥vi. *ad Col.* ℥iii. *cui adde Syr. Roſar. ſolut.* ℥ß. *m. Hauſt. mane ſumendus.* Vel,

℞ *Rhabarb. Pulv.* ϑi. *Croc. Pulv. gr.* iv. *ol. Cin. gtt.* ii. *ol. Nuc. Moſchat. gtt.* i. *Confect. Fracaſt. ſine Melle* ʒß *vel* ϑii. *m. f. Bol. ſummo mane ſumendus ſuperbib. Hauſt. Vin. Rub. uſt. cum Paulo Cinnamomi.*

In beginning Conſumptions, after we have, by gentle Vomits, and purging Medicines, if they are thought neceſſary, clear'd the firſt Paſſages; we may then proceed to reſolve the Obſtructions ſeated in the Stomach, Liver, Spleen, *&c.* and as they are only recently form'd, ſo a ſmall *Momentum* added to the Blood, will be capable of diſingaging them from the Habit of the Bowels they poſſeſs.

Applic.

Applic. Emplaſt. Epiſpaſtic. amplum & Acre inter Scapulas.

℞ *Conſerv. Roſar.* ʒi. *Conſerv. Cynosbat. Zinziber. Cond. ana* ʒß *Spec. Diamb. ſ. od. Flor. Sulph. ana* ʒi. *Balſ. Peru. gtt.* xii. *cum q. ſ. Syr. Balſ. m. Elect. Capt. Quantitat. Nuc. Moſchat. omni Mane, Hora* 4ta *Pom. & Hora ſomni Superbib. Hauſt. ſequent.*

℞ *Aq. Puleg.* ʒvi. *Tinct. Croc.* ʒß *Sal. Tart.* ʒß *Sal. Vol. C. C. gr.* iv. *Syr. Balſ.* ʒiii. *m. f. Hauſt. omni Doſi Electuarii ſumendus.*

IF the Decay or Waſte proceed from hard Drinking, I ſhould prefer the following as more efficacious.

℞ *Tinct. Sacr.* ʒii. *Elix. Prop.* ʒß *Aq. Abſinth. C.* ʒiii. *m. f. Hauſt. mane ſumendus.*

℞ *Pill. Stom. cum Gum. Pulv. Rhei. ana* ʒiß *Chalyb. cum. Sulph. ppt.* ʒi. *Rad. Zed.* ʒii. *cum q. ſ. Balſ. Peru. vel Balſ.*

Sulph. Terebinth. m. Pill. minor. in oc. 69. obruend. Capt. 5. Mane & Hora somni superbib. Coch. 6. sequent.

℞ *Summ. Absinth. Rom.* ʒiv *Centaur. minor. Flor. Camomel. ana p.* i. *Sem. Cardamom. minor. Macis ana* ʒi. *flavid. Aurant.* ℈ii. *Rad. Gent.* ʒi *Coquantur simul. in Vin. Alb. Lisbonf.* ℔i. *per Horas* xii. *Col. cui adde Vin. Chalyb.* ʒii. *m. infus.*

℞ *Elixir. Vitriol.* ʒß *m. Capt. gtt.* xii. *in Vin. Haust 2. Horis ante Prandium.*

℞ *Chel.* 69. *ptt. oc.* 69. *ppt. ana* ʒi. *Sachar. Rosar.* ʒiß *ol. Cin. gtt.* vi. *m. in Chart.* 6. *divid. Capt.* i. *Mane &* 4ta *vel* 5ta *pomerid. superbib.* ℔ß *Lact. Asin.*

LET the Patient refrain all manner of Malt Liquors, and for his constant Drink take the following;

℞ *Sarf.* ʒiv. *Chin. Nodos.* ʒii. *Rad. Ering. cond.* ʒiß *Coq. in Aq. Font.* ℔vi. *ad* ℔iii. *Col. cui adde Spt. Nitr. Dulc.* ʒiii. *m. bibat Copiosè & ad libitum.*

NOW

NOW as the Patient's Sleeps in Conſumptive Habits are generally unſound and diſturb'd, ſo I always take Care to ſecure their Tranquillity, by gentle Opiates adminiſter'd every Night at the Hour of Reſt.

℞ *Confect. Fracaſtor. ſ. Melle* ℈ii. *ol. Cin. gtt.* i. *Pulv. è Chel.* 69. *Comp.* ℈i. *Laud. Liquid. gtt.* xii. *m. f. Bol. Hora ſomni ſumendus ſuperbib. Hauſt. ſequent.*

℞ *Aq. Lact.* ℥ii. *Aq. Theriac.* ℥vi. *Syr. è Mecon.* ℥vi. *Spt. Nitr. Dulc. gtt.* xx. *m. f. Hauſt.*

ASSOON as the Obſtructions are reſolv'd by the Force of the foregoing Medicines, it will be highly neceſſary to conſider, how we may moſt commodiouſly diſpoſe of the obſtructing Matter. It is true, the beſt and ſafeſt way, is to fling it upon the Surface of the Skin; but this is a precarious Attempt, and will not always be effected, and it depends more on the Efforts of Nature, than any Set of Medicines we can employ to aſcer-

aſcertain this Operation. Tho' when it is poſſible to be done, I know nothing more prevailing than good generous Cordials, Spicy Bitters, and the Spaw Waters, or our *Engliſh* Chalybeat Waters at *Tunbridge*, *Iſlington*, or *Hampſtead*.

To apply, therefore, a Force capable of driving the Moleculæ or Coheſions to the Surface of the Body, is the ſame as to encreaſe the *Momentum* of the Blood; for which End and Purpoſe, I prefer the following, to all other Preparations;

℞ *Conſerv. Abſinth. Rom.* ℥j. *Conſerv. Anthos* ℥ß *ſpecier. Diamb. ſ. o d.* ʒi. *Flor. Sulph.* ʒß. *Croc. Pulv.* ʒß. *m. f. Elect. cum q. ſ. Syr. Garioph. Capt. Quant. Nuc. Moſch. tribus Horis Medicinalibus ſuperbib. Coch. quatuor Infuſ. ſeq.*

℞ *Rad. Gent. Galang. Calam. Arom. Zedoar. ana* ʒi *Cochinel.* ℈ij. *infund. in Vin. Alb.* ℔i. ℥iiij *per Horas* xij. *Col. cui adde Spt. Lavend. C.* ʒij. *Spt. Nitr. Dulc.* ʒi. *m.*

Bibat.

Bibat. Aq. Spadienſ. ℔ij. *in Tempore diei pro potu ordinario.*

WHEN, by any of the foregoing Remedies, the Matter of the Obſtructions is either carry'd off by an encreas'd Perſpiration, or lodg'd upon the Surface of the Skin, in Form of Spots, Botches, Bumps, or Blains; then it will be neceſſary to conſult the moſt proper Means, in order to reſtore the Spring of the Fibres miniſtering to the ſeveral Evacuations. And I ſeldom find Occaſion for any other Remedies, beſides the *Peruvian* Bark; which will cure all Manner of Fluxes, when the Body has been thus prepar'd for its Reception.

℞ *Cortic. Peru.* ℥j *Cochinel.* ʒiij. *Sal. Tart.* ʒij. *Milleped.* ʒiß. *Croc. Pulv.* ʒß. *Syr. Garioph. q. ſ. m. fiat Elect. Capt. Quantit. Nuc. Moſchat. omni Mane hora quarta Pomerid. & Hora Somni ſuperbib. Coch.* 4*tr. Julep. ſeq.*

℞

℞ *Aq. Germin. Querc.* ℥vj. *Aq. Cin. fort.* ℥iiij. *Spt. Nitr. Dulc.* ℥j. *Sachar.* ℥ij *Marg. ppt.* ℥j *m. f. Julep.*

THESE Medicines not only reſtore the Spring of the whole Vaſcular Syſtem, but they ſcour the Glands of any viſcid Particles that may ſtick in their Orifices, and render their Contractions more reſtive than is conſiſtent with a free Circulation, or the Performance of the ſeveral Functions of the Animal Oeconomy.

CHAP.

CHAP. VII.

Of the Cure of Decays, Waſtes, and Conſumptions, in their Second Stage, attended with a Hectick Fever.

BUT by Reaſon of the ſlow and inſenſible Progreſs that Conſumptions make, and the little Diſturbance they create to the Patient in their firſt Onſet, it often happens, that the Phyſician is not call'd time enough to adminiſter Remedies in the firſt Stage of this Diſeaſe.

To a Mind greatly attentive to the Nature of Things, this State of Conſumptions will clearly appear, only a Change of the Symptoms, from the ſame immediate Cauſes, having made greater Advances upon the Conſtitution; for now the Obſtructions begin to faſten more firmly to the ſeveral Bowels they poſſeſs; upon which,

which, Tubercles, Schirrous Swellings, and Scrophulous Tumours ariſe in the Stomach, Liver, Spleen, and Meſentery Glands; which exaſperate that ſlow Erratick Fever, and change it into a Fever of the Hectick Kind.

THE Cure of Conſumptions in this ſecond Stage will be attended with great Difficulties, becauſe of the poor, thin, impoveriſh'd State of the Blood, ariſing from an Effeteneſs and Languidneſs of the Solids, ſcarce able any longer to maintain the Circulation; and which Diſorders, perhaps, were brought on the Conſtitution, from a Way of Living highly contrary to the Courſe of Nature.

NOW as the Obſtructions, Tubercles, and Schirrous Swellings are ſtrongly wedg'd upon the Habit of theſe ſeveral Bowels; ſo it will be our peculiar Care to make Choice of a Set of Medicines that may encreaſe the Weight and Momentum of the Blood, to a Degree capable of diſengaging the ſeveral Degrees of the Obſtructions, and the Advances they have made.

made. In this Caſe, we ſhall have an Occaſion for more powerful Aſſiſtance, than was neceſſary in the Cure of beginning Conſumptions.

HAVING therefore regulated the Air, Diet, and Exerciſe agreeable to the different Nature of the Decay, and the Advances it has made; our next Buſineſs will be to conſider of the Remedies moſt proper to be employ'd in the Beginning of the Cure, and even in this Second Stage of the Diſeaſe: If an extreme Nauſea affect the Stomach, I ſhould prefer a Vomit, with the following Reſtrictions, to all other Adminiſtrations.

FIRST, That we take great Care to adminiſter none but the moſt mild and gentle; the Baſis of which ſhould be *Salt of Vitriol*, *Oximel of Squills*, or the *Ipecacoanha*.

SECONDLY, That we work not the Vomit to too great an Impairation of the Patient's Strength; for the mildeſt Vomit, if too much encourag'd with freſh Supplies

Supplies of Carduus Tea, or Water Gruel, will produce all the Effects of the moſt violent Emeticks, and diſtreſs the Strength to a very high Degree.

LASTLY, That, after the Third or Fourth Rejection, we endeavour to appeaſe the Stomach by adminiſtering every thing that may reſtrain its Operation.

IF theſe Inſtructions be carefully regarded, Emeticks may as ſafely be given, and repeated in this Second, as in the firſt Stage of this Diſeaſe.

AFTER the Operation is ended, let the Patient take two or three Spoonfuls of burnt Claret; and at Night the following Draught.

℞ *Aq. Font.* ℥ij. *Spt. Cherm.* ℥j. *Syr. è Mecon.* ʒvj. *Spt. Nitr. Dulc. gtt.* xx. *Laud. Liquid. gtt.* xij. *m. f. Hauſt.*

NOW as the Obſtructions are firmly wedg'd upon the Conſtitution in this Second Stage of the Diſeaſe, ſo will it be highly

highly neceſſary, before we attempt a Reſolution of the Tubercles, ſchirrous Tumours, and ſcrophulous Swellings, that we endeavour to looſen or ſoften the Matter pent up in the Viſcera, and relax the Veſſels, that too tightly embrace it; and I know no Medicines that will better anſwer this Purpoſe than the following.

℞ *Ol. Amigd. Dulc.* ʒiiß. *Syr. Capillor. Ven.* ʒij. *Oximel. Scillitic.* ʒß. *Bal. Peru. gtt.* viij. *Sachar. Albis.* ʒiij. *m. f. Linct. Capt. Coch.* j. *6ta quaque Hora ſuperbib. Hauſt. ſeq.*

℞ *Amigd. Dulc. excort.* ʒiß. *contund. quamoptimè in Mortario Marmor. ſensim affund. Aq. Hord.* ℔iß *cui adde Aq. Cin. Hord.* ℔ß. *Spt. Nitr. Dulc.* ʒiß. *Syr. Balſam.* ʒj. *m. f. Emulſio Capt. Hauſt. frequenter & cum Linct.*

℞ *Ol. Lin.* ʒx. *Syr. è Mecon.* ʒj. *Spt. Nitr. dulc. gtt.* xx. *m. Capt. Hora ſomni.*

THESE Medicines, plentifully exhibited, in a little Time will ſoften this Matter,

ter, and take off from the Tenſion of the Veſſels; after which the following will more eaſily effect a Reſolution of the Obſtructions, and, conſequently, cure the Diſeaſe.

℞ *Limatur. Ferri Croc. Pulv. ana* ʒii. *Balſ. Peru. q. ſ. m. Pillul. mediocres.* Vel,

℞ *Ethiop. Min.* ʒß *Extract. Gentian.* ʒii. *Camphor.* ℈i. *cum q. ſ. Balſ. Sulph. Aniſat. m. Pill. medioc.* Vel,

℞ *Cinnab. nat.* ʒß *Gum. Myrrh.* ʒii. *Balſ. Peru. q. ſ. m. Pill. Capt.* 3. *omni Mane Hora* 4ta *pomerid. ſuperbib.* ℔ß. *ſequent.*

℞ *Sarſaparil.* ℔ß *Lig. Sanct.* ʒiv. *Antimon. Crud. in Subtiliſſimam Pulv. redact. & in Nodulo ligat.* ℔i. *Coquantur in Aq. Font.* ℔viii *ad* ℔iv. *per ſubſident. depuratur.*

℞ *Apozemat.* ℔ii. *Spt. Nitr. Dulc.* ʒii *m.*

I MUST confeſs, I ſcarce can conceive any Obſtructions in the Body, that will be able to ſtand before the Force of theſe Medicines,

dicines, especially if assisted by a fine, clear Air, a light easy Diet, and proper Exercise; for these Medicines consisting of different Gravities, will communicate a different Weight and *Momentum* to the Blood, and, consequently, succeed in the Cure of different Decays.

THESE Medicines are to be continued till the Obstructions are resolv'd, which will appear from the Intermissions of the Hectic Fever, the Abatement of the Cough, and a total Cessation of all the other Symptoms.

I AM very sensible that any of the foregoing Medicines will increase the Heart's beating, and, consequently, the Fever; but then the Fever at this Time, is only increas'd from the Operation of the Medicines, in order to fling the Blood with a greater Force and Weight upon the obstructed Parts, and, without which Force and Weight, it will be impossible to resolve the Obstructions; and hence appears the Reason why we have so seldom succeeded in the Cure of Consumptions; because

we were afraid of adminiſtering Medicines that only are capable of curing the Diſeaſe, for fear of exaſperating the Cough, Fever and other Symptoms; when, from all the Experiments I have made, the Fever never continues longer than the Operation of the Medicine, which, at longeſt, from its firſt Exertion in the Blood, cannot be above four Hours; and the after Relief given from this Impetus is wonderful, conſidering the little Embaraſment is laid upon the Conſtitution, during its Continuance.

I VERY well know, that the common Methods of Cure run very much upon the Teſtaceous Powders, Balſamick Medicines and the Aſs's-Milk, which, what Force they can have more, than by their ſoftening, lubricating Qualities, to appeaſe the Symptoms, and diſpoſe the Obſtructions for an eaſier Reſolution, I am unable to comprehend.

AFTER the Obſtructions are diſingag'd, it will be proper to uſe the Bark, in order to brace the Fibres, and reſtore the Solids to their former State, though, I muſt confeſs, we ought to be highly careful, before we proceed

proceed to brace the vaſcular Syſtem, that no Particles of Matter remain attach'd to any Viſcus; for the Bark will not fail to lock up thoſe cohering Particles upon the Habit, by contracting the Machinulæ of the Fibres, and thereby increaſing a greater Rigidity and Tenſion on the Parts affected; and, therefore, before we proceed to adminiſter the Bark, I ſhould think it not improper, if the Patient take the following Medicine three or four Days, by way of Precaution.

℞ *Aq. Puleg.* ℥vi *Suc. Limon.* ℥ß *Sal. Tart.* ʒß *Milliped. ppt.* ℈i. *Syr. Balſam.* ʒiv. *Spt. Nitr. Dulc. gtt.* xxvi. *m. f. Hauſt. Mane que Nocte ſumendus.*

THIS Medicine will greatly ſcour the Glands, and deſtroy any viſcid Particles or Coheſions that may adhere to the Coats of the Veſſels, after the Bulk of the Obſtructions is reſolv'd. When we are very well aſſured, that the ſeveral Viſcera are clear of Obſtructions, which may be diſcover'd by the Remiſſions or Intermiſſions of the Hectic Fever, we may then proceed to ex-

hibit the Bark; and I know not any Form ſo efficacious in this Stage of Conſumptions as the following;

℞ *Cortic. Peru. contuſ.* ʒiß *Scob. Querc.* ʒvi. *Cortic. Granator.* ʒß. *Sal. Tart.* ʒiii. *Cochinel.* ʒii. *Coque in Aq. Font.* ℔iii. *ad.* ℔iß *Col.*

℞ *Col.* ʒii. *Aq. Theriac.* ʒi. *Spt. Nitr. Dulc. gtt.* xx. *Syr. Papaver. Eratic.* ʒvi. *m. Hauſt. 6. vel* 8ta *quaque Hora ſumendus.*

In the mean time, he may drink the Spaw-Waters, or our *Engliſh* Chalybeat-Waters, which will mightily avail in confirming a ſound Habit of Body.

How ridiculous and vain, therefore, is it to pretend to Cure a Conſumption by any one Specific, when, from the Nature of the Symptoms, and different Degrees of the Diſeaſe, it evidently appears, that there is an abſolute Neceſſity for a Variety of Medicines, as well as a different Proceſs, in order to compleat a ſucceſsful Cure?

CHAP.

CHAP. VIII.

Arguments againſt the Poſſibility of curing Ulcers of the Lungs.

THUS far concerning the curative Indications moſt proper to be employ'd in order to relieve the firſt and ſecond Stages of Conſumptions: I ſhall now proceed to conſider the Poſſibility or Impoſſibility of curing Conſumptions in their laſt Stage; that is, the Poſſibility or Impoſſibility of curing a Phthiſis, and that is a Conſumption of the Lungs.

THAT there is a Period of Time beyond which there is no Redemption, that is, a Period of Time when Conſumptions become abſolutely incurable, is without all Queſtion; but whether I may ſafely date the Epocha of that Period from the Moment that Ulcers begin firſt to affect the Lungs, is the grand Point I am now to

debate upon. I ſhall, however, here ſubjoin the Arguments both for and againſt the Poſſibility of curing Ulcers of the Lungs, after they are form'd in conſumptive Habits, as the beſt way to determin, clearly, concerning the Iſſue of this Controverſy.

To proceed, therefore, in ſupport of the Arguments againſt the Poſſibility of curing Ulcers of the Lungs; it muſt be acknowledg'd, that whatever may be done in the firſt and ſecond Stages of this Diſeaſe, in order to aſcertain a perfect Cure; certain, I am, that there ſeems but little Hopes, when the Body is worn out under the Violence of a Diſeaſe, and that Diſeaſe, perhaps, brought on by a Way of living highly contrary to the Courſe of Nature; can it be expected, in ſuch a diſtreſs'd State and Condition of the Solids; but that the attracting Principle of the Blood will be ſtrongeſt towards itſelf, and not towards the affected Lungs.

In ſound Conſtitutions, while the Fibres retain their natural Elaſticity, the Solids have

have a Power to divide the Blood, and after its Diviſion, to draw it off from the Maſs, for the Repairs of the ſeveral Parts; and this Diſingagement, the Solids have a Power to make, we call their attracting Principle, which intirely depends on their natural Elaſticity.

WHENEVER, therefore, this natural Force of the Solids abates, or by any Means is leſſen'd, then their contracting Powers will be impair'd; upon which the attracting Principle of the Blood will be increas'd, and form Obſtructions, *&c.* in divers Parts of the Body, which will be in Proportion to the Abatement of the elaſtic Spring of the Solids. And this is the Reaſon why Wounds ſeated in Parts no way dangerous, as to the vital Principles of Life, often Mortify, often turn Cancerous, Fiſtulous, *&c.* eſpecially when they happen in Bodies highly Scorbutic, running from Part to Part, from Joint to Joint, till at laſt they infeſt the whole Maſs of both Solids and Fluids, and put a univerſal Stop to all the Springs of Nature.

THAT

Reaſons that ought to induce us to conclude Ulcers of the Lungs incurable.

THAT we ought, therefore, to conclude Ulcers of the Lungs incurable, may be collected from the ſad Experience of Thouſands that daily fall Victims to the Rage and Fury of this mercileſs Enemy; and the Cauſe of all this Ravage, I can impute to nothing elſe but the Difficulty of reſtoring the Diſcharges, by Expectoration, and the other Outlets of Nature, to their natural Standard, while the Body labours under a Phthiſis.

FOR, in all Caſes of Ulcers, eſpecially of thoſe that affect the Lungs, the Evacuations receive a larger Quantity of Juices for their Diſcharge, than the Body can well ſpare, without defrauding the ſeveral Parts of their juſt and neceſſary Supplies. And this larger Quantity is detach'd continually from the Habit, as well as the circulating Fluids, by the Attrition of the Solids, and the Friction they make in ſupporting the Actions of Nature, and becauſe of the Obſtructions in ſuch Caſes inwardly form'd upon divers of the Viſcera; and, in Conſequence of theſe Obſtructions, becauſe of the Plethora continually

tinually charging upon the Habit a Quantity of Juices greater than it can bear, which over-balances the Heart's Motion, whereby the Evacuations are intended.

SO that, according to this mechanical Way of Reaſoning, the Obſtructions inwardly form'd upon the ſeveral Viſcera, are the Cauſe of the Plethora, and the Plethora of the Heart's greater Motion, and the Heart's greater Motion is the Cauſe why the Diſcharges are irregularly made by the Evacuations; that is, in one Word, that the Solids miniſtering to the ſeveral Diſcharges, are unable to ſurmount the Reſiſtance of the Heart's greater Impulſe from the Plethora.

ADD, to this alſo, that when a Decay is ſo highly advanc'd into the Habit, as to generate Ulcers in the Lungs, it is a certain Preſage, that the Balſam of the Blood is deſtroy'd; and how it will be poſſible to reſtore the Balſam of the Blood under thoſe Circumſtances, without giving a new Vigour to the Solids, I muſt confeſs myſelf unable to conceive.

FURTHER,

FURTHER, but in Caſe it were poſſible to brace the Solids miniſtering to the ſeveral Diſcharges, and give the whole vaſcular Syſtem a Strength capable of making Reſiſtance to the Heart's Motion, as alſo, by proper Applications, to renew the Balſam of the Blood; yet this would not ſerve the Turn, unleſs at the ſame time we could reſtore the Texture of the Lungs; and how the Texture of a Bowel, form'd of ſuch a fine, membranaceous, vaſcular Subſtance, ſhould be render'd capable of a Cure, under a Conſumptive Habit, I muſt confeſs, to me appears moſt improbable, for the following Reaſons.

Firſt, BECAUSE, while the Body labours under the Phthiſical Conſumption, the Particles of the Blood do ſo ſtrongly cohere among themſelves by their attracting Principle; that the Solids cannot diſingage a ſufficient Quantity, to make good the Repairs of what is expended in carrying on the Actions of Life.

Secondly,

Secondly, BECAUSE the Fibres of the whole Vaſcular Syſtem are ſo highly impair'd, that they cannot reſtore the Balſam of the Blood, on which the Cure of all Ulcers of the Habit intirely depends.

Thirdly, BECAUSE the Parts of the Lungs themſelves, that, from the Nature of their Office, are oblig'd to be in Motion, almoſt every Second of Time, are moſt improperly diſpos'd to reſt towards a ſucceſsful Cure: A Habitude abſolutely neceſſary, where we would diſpoſe the Lips of a Wound to heal or unite.

Fourthly, BECAUSE the continual Violence of the Cough, Hectic Fever, and large Expectoration of Putrid Matter, daily diſcharg'd by the Bronchial Veſſels, will rather widen than diſpoſe the Ulcer to heal.

AND, *Laſtly*, Becauſe, in all Waſtes and Decays, the Medicines moſt fitly adapted to anſwer the great Ends of Cure, are thoſe that ſtimulate or raiſe the Contractions of the Solids, and increaſe the

ſeveral

ſeveral Secretions, which are Enemies to the Ulcer, and exaſperate the Cough, Fever, and other Symptoms.

THESE are the Reaſons on which I have grounded the Arguments againſt the Poſſibility of curing Ulcers of the Lungs: I ſhall now proceed to examine the Force of the Arguments, in Defence of the Poſſibility of their Cure, after they are recently form'd in conſumptive Habits.



CHAP.

CHAP. IX.

Arguments in Defence of the Poſſibility of curing Ulcers of the Lungs.

I WOULD very tenderly enter upon Arguments in Defence of the Poſſibility of curing a Diſeaſe, the moſt eminent Authors have determin'd incurable; were I not very certain, that the ſame Authors have determin'd thoſe Diſeaſes incurable, which later Experience has convinc'd us are curable.

I MUST confeſs, I was of different Sentiments myſelf, when I publiſh'd my *New Theory of Phyſick and Diſeaſes*, as will appear to any one that peruſes the laſt Chapter of that Book; wherein I have determin'd an Ulcer of the Lungs as that fatal Period of Time, beyond which there is no Redemption. But I think myſelf oblig'd

oblig'd in Honour, to retract any Opinion of mine, that, upon a ſecond Review, I perceive not grounded on the Principles of Nature, which ought to be the Standard of Reaſoning in all our Enquiries. However, I was led into that Miſtake, by very great Authorities: Authority! thou Father of all Errors, thou Enſlaver of the Mind; that hoodwinks the Underſtanding, and keeps all Arts and Sciences, that ſhould benefit Mankind, in perpetual Darkneſs and Obſcurity!

IT is certainly in our Power to prevent Obſtructions of the Lungs, turning to Tubercles or Vomica's, and, conſequently, of Tubercles or Vomica's turning to Abſceſſes, or Ulcers, if Advice is but demanded in Time. They that deny this, muſt deny that we are capable of curing a Pleuriſy or Peripneumony; for certain I am, that the latter always ariſes from Obſtructions of the Lungs, that diſpoſe the ſtagnant Juices to lodge upon their fine, veſiculary Subſtance, to which ſucceeds a Rupture of their Fibres, and a large Diſcharge of purrulent Phlegm, the

the ſureſt Indication that the Lungs are affected.

BUT before I proceed to Reaſon upon the Arguments, I have to advance, in Defence of the Poſſibility of curing ulcerated Lungs; I muſt beg leave here to obſerve, that I do not take upon me to defend the Poſſibility of curing all Ulcers of the Lungs, but only thoſe that are recently form'd on the Habit of this Bowel, and, therefore, the following Arguments have no Relation, but to a beginning Phthiſis falling on the Lungs from ſome great Cold, or other Abuſe of the Six Non-naturals; and not when the Patient is hereditarily diſpos'd to it, or the Diſeaſe is complicated with Tubercles or Schirrous Swellings affecting the lower Bowels at the ſame time. A Phthiſis ſo complicated, I muſt except from all Poſſibility of a Cure; and ſhall conſider the relieving of a Phthiſis ſo circumſtantiated, in the next Chapter.

I KNOW there are ſome that maintain the abſolute Poſſibility of curing all Ulcers of the Lungs, under what Degree, or of

how long ſtanding ſo ever. This, I muſt confeſs, looks like a daring Attempt; and I wiſh, as well for the Benefit of Mankind, as the Honour of Phyſick, that Succeſs may always attend their Undertakings. Thoſe Gentlemen would do a very great and acceptable Service to the Commonwealth of Phyſick, in diſcovering thoſe Principles, by whoſe Influence, this great Revolution in a Diſeaſe ſo extraordinary, may be accompliſh'd. But there ſeems to me, ſome Contra-indications that abſolutely forbid us to attempt a Cure in the laſt Stage of Phthiſical Conſumptions; becauſe the Medicines moſt proper to diſingage the Obſtructions of the lower Belly, will exaſperate the Cough, Fever and other Symptoms, and becauſe the Power or Force neceſſary to reſolve the Obſtructions, would ſooner deſtroy the Texture of the Solids under ſuch imminent Weakneſſes, than effect their Diſingagement.

FROM the Arguments advanc'd in the former Chapter againſt the Poſſibility of curing ulcerated Lungs, it clearly appears that the general Indications, in Relation to their

their Cure, are reduceable to the Four following Propoſitions.

Firſt, THAT great Care be taken to appeaſe the Evacuations, and reduce their Diſcharges to a natural Standard.

Secondly, THAT we attempt to aſſwage or relieve the Violence of the Cough, Hectic Fever, and that large Diſcharge of Matter continually expectorated from the Lungs.

Thirdly, THAT we endeavour to reſtore the Balſam of the Blood greatly impair'd by the Violence of the Diſeaſe.

AND, *Laſtly*, having invigorated the Conſtitution of the whole vaſcular Syſtem, that we endeavour to digeſt the Ulcer, and diſpoſe it to heal.

THESE are the ſeveral Points on which I ground the Poſſibility of curing Ulcers of the Lungs, and if I make good theſe ſeveral Indications, by plain Reaſonings, ſupported with Matters of Fact, I hope I ſhall anſwer the End of writing this Chapter. And as

the first Proposition concerns the Reduction of the Evacuations to their natural Standard, so I shall proceed, first, to consider the Requisites most necessary, in order to dispose them to a regular Discharge.

THE Reason, as we have observ'd in the foregoing Chapter, why we cannot cure Ulcers of the Lungs, is, because we cannot stop the Evacuations; and the Reason why we cannot stop the Evacuations, is, because the Impulse of the Heart, which, in all Decays, is always superior to the Resistance of the other Parts, sends the Fluids to the several Discharges with a Force greater than what they can make Resistance to; and in case we could effect a Stoppage of the Evacuations, yet the superfluous Juices would find out a Vent by the respiratory Organs, and discharge a large Quantity of the Plethora by Expectoration, in form of tough, viscid Phlegm. Now, if by any means we can possibly discover a Way, by which we may lessen the Plethora, that would be a Means to lessen the Heart's Motion, and, consequently, the Evacuations dependant on its Motion.

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THE ſame Means, that ſerve to reſtrain the Evacuations, will, in a great Meaſure, help to reſtore the Balſam of the Blood; for in all ſound Conſtitutions, there is a peculiar Balſam in the Blood, whereby its Particles unite with any Wound or ulcerated Part, in order to its Healing, without any Aſſiſtance from Art; and a very eminent Surgeon was pleas'd to affirm, That he was concern'd for a Patient, who, in a Rencounter, was run through the Neck, the Sword coming out at the Left Side, which Wound was ſucceſsfully cur'd with only a Pledget dipt in a Digeſtive, and externally apply'd to each Orifice: In the mean time, the Blood doing the Office of a Balſam, in diſpoſing the internal Parts to heal. And, by the Way, this affords us a clear Anſwer to thoſe, that would impoſe upon us that cozening Trick of curing Wounds by Sympathy, which conſiſts in dreſſing the Inſtrument, as you would the Wound, with the Sympathetic Powder or Balſam; when at the ſame Time, if no ſuch Application were to precede, the Wound, in a

An Anſwer to thoſe that aſſert the Poſſibility of curing Wounds by Sympathy or Magnetiſm.

ſound Habit, would, in a ſhort time, diſpoſe to heal of itſelf.

If we enquire into the Nature of this Balſam of the Blood; we ſhall find it only to conſiſt of a greater Quantity of nutritious Particles the Blood is diſpos'd to part with under a ſound Habit, and when the Conſtitution is not vitiated; but when the Solids are highly impair'd, then this Balſam is deſtroy'd, and Wounds or Ulcers are but with great difficulty diſpos'd to heal; and this is the Reaſon why they often turn to Fiſtula's, Cancers, or Mortifications.

To apply all this to the Cure of Ulcers of the Lungs. The Queſtion is, Whether it is poſſible to oblige the Symptoms of the Evacuations, Hectic Fever, Plethora, and of that large Diſcharge of purulent Matter, that goes off by the Bronchia in Expectoration, to give way? And this Queſtion implies another, and that is, Whether it is poſſible to reduce the Body, where Ulcers affect the Lungs, into a Condition of being nouriſh'd, that is, reſtore the Balſam of the Blood? And this Queſtion directly involves another,

another, and that is, Whether it is poſſible to reſtore the Texture of the Solids to that Freedom of Action they obtain'd, before the Conſumption had an Exiſtence in the Body, that is, before the Ulcer was form'd upon the Lungs? and we certainly ſhall be able to effect theſe ſeveral Points, relating to theſe Queſtions, if we avoid the Cauſes that impair the Texture of the Solids, that make the ſeveral Secretions miniſtering to the Diſcharges irregular, that deſtroy the Balſam of the Blood, that increaſe the Diſcharge of Phlegm by the Reſpiratory Organs, and exaſperate the Cough, Fever, and other Symptoms; and we certainly ſhall avoid the ſeveral Cauſes of all theſe Diſorders, reſtore the Texture of the Solids, deſtroy the Plethora, the Grounds of the foregoing Symptoms, reduce the ſeveral Evacuations to their natural Standard, renew the Balſam of the Blood, and, conſequently, diſpoſe the Ulcers of the Lungs to unite and heal, if we can reduce the ſeveral Arguments and Reaſonings on this Subject, to the following Heads.

First, THAT we take care to adviſe the moſt etherial, alimentary Diet, and ſuch as may lay the leaſt ſtreſs upon the Solids to digeſt.

Secondly, THAT we be careful to inforce the Diſtribution of this Diet by an Exerciſe moſt appropriated to the Exigency of the Caſe:

AND, *Laſtly*, that we endeavour to invigorate, at the ſame Time, the whole vaſcular Syſtem, by a few of the moſt choice and generous Medicines.

ALL Authors that have writ upon Conſumptions, with the Approbation of the learned World, obſerve, that the Hectic Fever is always greatly exaſperated after a full Meal, or upon eating Things of difficult Digeſtion, yet not one of them has ever taken the leaſt Pains to obviate this Difficulty. Certainly, when, from repeated Experience, we are ſure in certain given Circumſtances, to expect a Return of the Fever, ſome regard ought to be taken, in

in order to prevent it, or at leaſt to appeaſe its Symptoms; and this I the rather mention here, becauſe the Hectic Fever is the moſt ſtubborn Symptom that attends Conſumptions.

To accompliſh this important Point, and reduce the Diſcharges to a regular Standard; I think it would not be improper to limit the Patient's Diet to the ſmalleſt Pittance it is poſſible for him to live upon, and, on this Account, to change the Cow's for the Aſs's-Milk, and of that only, to allow Half a Pint every Six Hours. The Solids would eaſily overcome ſo ſmall a Quantity of Aſs's Milk, and convert it into good Nouriſhment; or if we ſhould take the ſame Quantity of the Juice of bak'd Turneps; from ſuch a light, ſlender, attenuating Diet, there would enſue little ſuperfluous Moiſture, and of conſequence, there would be the leſs to run off by the ſeveral Diſcharges. This Diet, therefore, being the moſt Alimentary, would lay the leaſt Streſs upon the Heart, and of conſequence, give the impair'd Solids miniſtering to the Evacuations, time to reſtore their Springs.

How

How the Juice of Turnips came to be eſteem'd ſo great an Analeptic or Reſtorative in Decays; and ſo juſtly extoll'd in all manner of Conſumptions, I ſhould never have known, had I not been Witneſs of its great Vertues, in a Caſe that whole Palefuls of Aſs's-Milk and Viper's-Broth had not the leaſt Influence upon: And I could aſſign no other Reaſon of its Vertues, than as it is a Juice endued with the fineſt, lighteſt, and moſt ſoftening Qualities, and, conſequently, capable, from the Smallneſs of its Particles, of paſſing the minuteſt Strainers of the Body: So that what Experience firſt diſcover'd, Reaſon now confirms, that the Juice of Turnips is endued with Qualities moſt finely adapted for the Cure of Conſumptions.

To ſupport the Reaſonableneſs of Dieting the Patient labouring under a Conſumption, attended with an Ulcer of the Lungs, on ſo ſlender a Pittance, I would only take Notice of that attenuating Diet, every where recommended in Acute Diſeaſes, and how peculiarly aſſiſting the moſt at-

tenuating Fluids prove in leſſening the Severity of the Symptoms, eſpecially of thoſe burning Heats, intenſe Thirſt, Inflammations, Deliriums, Phrenſies, all the neceſſary Conſequences of the ſeverer Fevers. But I need not inſiſt upon this Point, ſeeing the following Accident will clear it from all Difficulties.

ABOUT two Years ago, as ſome Colliers were working in a Coal Mine, all on a ſudden, the Ground fell in, and Six or Seven were impriſon'd in the Pit for near Fifteen Days, during all which time, they declar'd, at their coming out, that they had not taſted the leaſt morſel of Bread, or any other thing beſides Spring-water, which iſſued from the Cleft of a Rock, where they were digging; nor was their Countenances much chang'd by living ſo long on ſuch ſlender Proviſions.

THIS ſingular Inſtance ſtrongly ſupports me in an Opinion, that much leſs is neceſſary to ſupport Nature in Diſeaſes, than we are aware of; and when a violent Nauſea or Loathing of all manner of Meats affects the Stomach, as generally is the Caſe in Conſumptions, but eſpecially a Phthiſis;

Phthiſis; I think it appears moſt Rational, that we ſhould very ſparingly provide it with Foods, till its Fibres have throughly digeſted off that load of Phlegm that lies impacted in its Folds; and which, it is to be fear'd, is rather increas'd than abated, by thoſe ſtrong Soups and Broths many preſcribe as the fitteſt Diet for conſumptive Habits.

NATURE is ſo fram'd, and the Actions of the ſeveral Parts ſo dependant on each other, that it's impoſſible any particular Part can ſuffer or be affected, but that all the reſt will exert their mechanical Powers, in order to reſtore it. And when, from the Fineneſs and Tenuity of the Aliment, they have ſo little to do in the Cauſe of Digeſtion, they will have the more Strength remaining, in order to overcome the Diſeaſe: Unleſs we grant this, it will be impoſſible to account for the Cure of a Hemorrhage of Blood that iſſu'd from the Lungs in the following Manner;

The Caſe of a Rupture of the fine Veſſels of the Lungs cur'd.

A young Lady paſſing the accuſtom'd Time of her Naturalia, without the leaſt Appearance, was about five Days after, ſeiz'd with a Hemorrhage

Hemorrhage of Blood, that ſuddenly burſted from her Lungs, to the Quantity of ℥xii. without the leaſt preceding Diſorder, yet nothing of Danger enſued upon this Diſcharge; ſhe had, indeed, for the firſt three or four Days, a dry Cough, and ſome light Symptoms of a putrid Fever; but by the help of a very attenuating Diet, and a few Medicines commonly preſcrib'd in theſe Caſes, all her Symptoms were reliev'd, and ſhe continues free to this Day from either Cough or difficulty of Breathing. I give not this as a ſingular Inſtance; I know it is a very common Caſe, and which ſometimes ariſes upon the Suppreſſion of the Menſtrual Flux, eſpecially in Conſtitutions, where the Lungs are tenderly diſpos'd; for a Plethora exiſting in the Veſſels, would certainly excite a dangerous Fever, were it not to diſcharge by ſome of the Evacuations; but if theſe, at ſuch Times, happen not to give Way, then the moſt weakly Part will next ſuffer, according to the equal Preſſure of the Blood equally driven into all the Parts from the Heart; and in this Lady's Caſe, that happen'd to be the Lungs.

THAT the fine Arteries of the Lungs did ſuffer a Rupture in this Hemorrhage, is evident, both from the Quantity of Blood diſcharg'd, the Nature of that Diſcharge, and its Colour. That this Diſcharge could not be made from the Stomach, is certain, becauſe no Vomiting enſu'd, nor Reachings, nor Nauſea, nor any other Symptom, by which we diſtinguiſh the Action of this Bowel to be affected. Nor could it fall from the Head, becauſe no Senſe of Fulneſs, no beating, throbing, Pain of the Temples, nor Inflammation of the Eyes preceded; which are Symptoms that generally prognoſticate a Hemorrhage of Blood about to iſſue from the Head; and that it was diſcharg'd from the Lungs, will appear yet more clear, from the Nature and Quality of the Blood diſcharg'd in this Hemorrhage; which was of a fine florid red Diſpoſition, the Craſimentum being in much greater Proportions than the Serum, which is the Nature of all Arterial Blood, from the infinite Diviſions it ſuffers above the Venal, from the greater Impreſſions of the Heart and Arteries.

WOUNDS,

WOUNDS, therefore, and Ulcers may be cur'd in any Parts of the Body, almoſt, while we can renew the Blood's balſamick Qualities, and we can renew the Blood's balſamick Qualities, while we can reſtore the Texture of the Solids. To diſpoſe a Wound or Ulcer, therefore, to heal, according to theſe Laws and Principles, is to diſpoſe it to be nouriſh'd, and to diſpoſe it to be nouriſh'd, is to give that Vigour to the Solids that may enable them to attract a ſufficient Quantity of alimentary Particles, in order to reſtore the Continuity of the affected Part; and the Solids will attract a ſufficient Number of nutritious Particles for their Repairs, while they are able to perform the Offices of Digeſtion, Separation, and Aſſimulation; and they will be able to perform all theſe reſpective Offices, while the Meats we take for Nouriſhment conſiſt of Particles the moſt divided and attenuated before they deſcend into the Stomach. This intirely confirms the Reaſonings I offer'd in Defence of the Aſs's-Milk, Juice of Turnips, and other attenuating Meats.

THE

THE only Lets and Impediments that ſeem to indicate Ulcers of the Lungs incurable, are the Cough, the Fever, and vaſt Load of Phlegm continually flung off the Lungs by Expectoration: Could we oblige theſe Symptoms intirely to retreat, I hope the moſt Ingenious will pardon me, if I ſay, we ſhould bid fair for an abſolute Cure.

NOW the only Means of remedying theſe Diſorders, and preventing their Return, is to ſubtract from their Cauſes, and as an Increaſe of Diet makes an Increaſe of Blood, and an Increaſe of Blood detaches a larger Quantity of Juices to the ſeveral Organs deſtin'd for Secretion, than they can well bear; ſo upon a ſparer and more attenuating Diet, there will be a leſſer Quantity of Blood, and, conſequently, a leſſer Quantity of Phlegm or Matter flung off by the Reſpiratory Organs.

BUT in order to ſet this Affair in the cleareſt and moſt conſpicuous Light it will poſſibly bear; I beg leave to conſider,

that the Quantity of Phlegm, or Matter, expectorated in a Phthiſis, depends entirely upon the ſuperior Force of the Heart ſending a greater Quantity of Blood to the Lungs, than they can diſpoſe of, under their impair'd State; which Quantity of Blood diſcharges, by the Bronchial Glands, a Quantity of Phlegm, much ſuperior to what the ſame Quantity of Blood would part with under a ſound State of Health; becauſe the Glands and Veſſels of the Bronchia are now relax'd, and becauſe, under that Relaxation, the Particles of the Fluids will run into too cloſe Contacts with each other; and hence it follows, that both the Quantity and Viſcidity of the Phlegm will, in a great Meaſure, depend on the Slowneſs of the Blood's Motion in the Bronchial Arteries, which, in theſe Circumſtances, afford very little of that impelling Force neceſſary to keep the Particles of the Fluids aſunder, and which all the Arteries retain ſo long as they can preſerve their Elaſtic Springyneſs.

Now the ſuperior Force of the Heart, excited at this Time, next to the Strength of its own Fibres, entirely depends on

the additional Quantity of Blood it receives from the unequal Diſtribution of this Fluid in Conſumptions, attended with Obſtructions in any of the principal Bowels; Therefore, by leſſening the Quantity of Blood, we leſſen the Motion of the Heart, as alſo the Quantity of Phlegm expectorated from the Lungs; and, of Conſequence, the Quantity of Juices diſcharg'd by any of the Evacuations.

How, therefore, we may leſſen the Quantity of Blood, or at leaſt of the circulating Juices in Conſumptive Habits, is the next important Point we are to enquire into; and for this End and Purpoſe, I ſhould prefer Woman's Breaſt Milk to all other Fluids; for being the moſt ſoft, light, thin, nouriſhing Fluid, it will deſcend into the Stomach in the leaſt given Quantities, and be tranſmitted thro' all the ſeveral Digeſtions in the leaſt Moment of Time; for it paſſes out of the Stomach into the Lacteals, and from the Lacteals into the Blood, and from the Blood, into Nouriſhment, without the leaſt perceivable Encreaſe of Motion; and as it wholly conſiſts of the

Particles

Particles of Nouriſhment, finely attenuated and divided, ſo it will afford the leaſt Excrements, and, conſequently, lay the leſs Streſs on the Solids miniſtering to the ſeveral Diſcharges.

WE are farther to conſider, that all the Time the Patient is making Uſe of this attenuating Diet, the Solids are exerting their beſt Efforts, in order to remove the Obſtructions, and give a Freedom to the Circulation; and when the Mechaniſm of the Fibres perceive ſo ſmall a Force to overcome, from ſuch a thin, light, attenuated Nouriſhment, as naturally will ariſe from the Breaſt Milk of a fine healthful Woman, they will naturally contract their Machinulæ, reſtore their Attractions, regain their Strength, and, conſequently, renew the Balſam of the Blood; upon which, as we have already obſerv'd, the Cure of Ulcers entirely depends.

MR. MATHEWS is a Gentleman now living, that was reduc'd to the laſt Degree by a Phthiſis, or Phthiſical Conſumption; all thoſe dangerous Symptoms attended

him, that preſs hardeſt on the Conſtitution in the laſt Stage of this Diſeaſe. He was ſubject to melting Night-Sweats, to a colliquative Looſeneſs, and foul Expectoration of vaſt Quantities of Phlegm: His Strength was ſo impair'd, that he could ſcarce ſit on Horſe-Back, unleſs held up by the Aſſiſtance of a Servant. In vain had he implor'd Advice; in vain the Aſſiſtance of Phyſick; ſince nothing he took availed him.

To this deplorable State was he reduced, when his Spouſe happen'd to be deliver'd of a Child. His Friends adviſ'd him to try the Effects of his Wife's Milk; and try it he did, with a Succeſs ſurprizing and extraordinary; for in Three Weeks Time he evidently perceiv'd all his Symptoms greatly to abate; and in Six Months, with Riding, and the freſh Air, he was perfectly reſtor'd from that moſt deplorable State, to which the Violence of his Diſeaſe had reduc'd him; and to this Day he continues a ſound hale Man, without the leaſt Symptom of Decay; although Fifteen Years are now expir'd ſince he firſt

eſſay'd

eſſay'd the Virtues of his Wife's Milk; whoſe Recovery, indeed, look'd more like a Reſurrection, than a Cure.

WHAT the Poets were pleas'd to aſſert of Honey, I may juſtly apply to Woman's Milk. There's ſomething in Woman's Milk divinely good; it is the moſt ſovereign Balſam in the World, and the greateſt Reſtorative in Nature. It greatly exceeds the Cows Milk, Aſſes Milk, Goats Milk, *&c.* as it is more nearly related to human Nature, and as it cloſes with the Parts almoſt as ſoon as it comes into the Blood. They therefore that expect the Benefits of this fine, Nouriſhing Diet, ſhould look out betimes for a fine, ſound, healthful Nurſe, eſpecially if they find all other Means in vain, and not ſuffer the Diſeaſe to become incurable, before they implore this ſalutary Aſſiſtance.

But Woman's Milk I only preſcribe as his Diet; the following Water I would recommend as an excellent Liquor, for his conſtant Drink.

℞ *Albumin. Ovor. No.* xxvj. *Lact. Vac.* ℔xvj. *m. diſtil. in Arena Calefacta ad Siccitatem.*

The Reaſon why I order this Water to be diſtill'd with a Sand Heat, is, becauſe the ſmaller the Heat communicated to any Liquor in Diſtillation, the finer, the lighter, and more divided will be the Particles of that Fluid. This Experiment I made by diſtilling the ſame Water in an Alembic, a cold Still, and a Sand Heat; and, in weighing theſe Fluids, I perceiv'd That elevated by the Force of a Sand Heat, much to exceed in Lightneſs That produc'd by an Alembick; and ſomething lighter than that rais'd in the cold Still: And, as in this Caſe, we want a Liquor the moſt divided, ſo the only Way to obtain that, will be by a Diſtillation effected with the leaſt Force of Fire. And as pure Milk and Eggs, of all Parts of Animals, are acknowledg'd to be the moſt nouriſhing; ſo, by the Force of a *Balneum Vaporis*, or the genial Warmth of the Sun's Beams, I believe it is poſſible, from the foregoing Ingredients, to exalt a Fluid as fine as the Nouriſhment of our Bodies;

Bodies; after, by the Force and Action of the Organs, it is exalted to the laſt Perfection, and, by the ſeveral Proceſſes of Nature, fitted to paſs the minuteſt Fibre of an Animal Body.

NOR let any think, that thus minutely dividing the Parts of Milk and Eggs, will in any Reſpect leſſen their Nutritious Virtues; for they will retain the ſame adheſive Qualities they had before; and all that Load of Nutrition we take for the Support of our Bodies, muſt ſuffer a minuter Diviſion before it can take any faſt Hold of the Conſtitution. And I could name a Perſon of Note, that receiv'd the higheſt Advantage from a Method of Diet inſtituted after this Manner. The Medicines I would recommend, as moſt fitly adapted to digeſt the Ulcer, are the following.

℞ *Balſ. Peru.* ʒij, *Syr. Balſam.* ʒj. *m. Capt. gtt.* xx. *ad* xxx. *ter in Die ſuperbib.* ℥iij. *ſeq.*

℞ *Vin. viperin.* ℔j. *Spt. Nitr. Dulc,* ʒj. *m. Mixt. Capt. Coch.* 6 *cum Mixt. ſuprapreſcript. & in Languoribus.*

WHEN the Ulcer is diſpos'd to heal, I would recommend the Bark in a Tincture, drawn with Spirit of Wine, of which he may take Two Drachms at a Time, in Milk Water.

THE only Point that now remains undetermin'd is, whether the foregoing Treatment will be of Efficacy enough to conſolidate the broken Fibres of the Lungs; and I muſt confeſs, that to me, and going upon theſe Principles, this Point ſeems certainly attainable; for why ſhould we think that the Lungs would not reſtore as ſoon, as Parts equally diſpos'd to Motion, eſpecially when the Balſam of the Blood and regular Diſcharge of all the Evacuations, by the foregoing Means, are reſtor'd? And I think that the Arguments I have urg'd in Defence of a Rupture of the Lungs, healing after a Hemorrhage of Blood, plainly prove, that Wounds of the Lungs are curable; and that conſequently Ulcers are ſubject to the ſame Laws,

Laws, after the Habit of the Body is reduced into a Condition of being nouriſh'd; that is, after the Balſam of the Blood is renew'd; and, that is, after the Solids are reſtor'd to their proper Tone and Vigour.

To conclude; If the Symptoms that attend Conſumptive Habits be the ſame with thoſe that attend old Age, and if the Symptoms of old Age be the ſame with thoſe that affect young Children, according to that Adage, *Senes bis pueri*; then it follows, that the Diet moſt fitting for young Children will be the moſt proper for old Age; then it follows, that the Diet moſt fitting for old Age will be moſt agreeable to Conſumptive Habits: And if ſo, then it follows, That Breaſt Milk, or Woman's Milk, will be the moſt proper Diet for reſtoring the Decays of human Nature, becauſe it will demand the leaſt Reſiſtance from the Solids, and cloſe with the ſeveral Parts almoſt as ſoon as it touches their Fibres.

Now whether the Arguments for or againſt the Poſſibility of curing Ulcers of the Lungs have the moſt Weight; and which

which are attended with the moſt viſible Circumſtances of Truth; and what further Improvements may be made in this Subject, and going upon theſe Principles; are Queſtions I ſhall leave to the Determination of Gentlemen endow'd with ſuperior Abilities.

THE Order of my Diſcourſe now requires, that I go on and examine the Indications moſt proper to palliate Conſumptions, when by the Laws of Nature they are incurable.

CHAP. X.

Of the Palliation of incurable Conſumptions.

WE have now laid before the Reader the ſeveral Indications moſt proper to be taken, in the Cure of all curable Conſumptions, and the Arguments for and againſt the Poſſibility of curing Ulcers in the Lungs; which laſt Point we have left to the Deciſion of more able Judges,

Judges, as being of too great Importance for our Determination.

I am now come to conſider the State of Conſumptions, when, by Reaſon of great Weakneſſes, or Decays of the Vaſcular Syſtem, they are render'd abſolutely incurable. This happens moſt frequently in the very laſt Stage, when the Obſtructions of the ſeveral Viſcera are ſo complicated, that it's impoſſible they ſhould admit of a Cure.

IN this Caſe, to apply a Force, Weight, or Momentum to the Blood, capable of reſolving the Obſtructions, would be the ſame as to apply a Force, Weight, or Momentum to the Blood, that would deſtroy the Texture of the Veſſels, and haſten the Death of the Patient.

IN theſe deplorable Circumſtances, therefore, our beſt Endeavours muſt terminate in Attempting to mitigate his Dolours, and palliate his other Symptoms during his Continuance; which, under theſe Circumſtances, at longeſt, cannot be very long.

THE

THE noble Art of Phyſick does not oblige to Impoſſibilities; nor is it any Reflection, juſtly chargeable on the Profeſſion, that ſometimes a Diſeaſe may happen not only to elude the Advice of the moſt able Phyſician, but alſo the Force of the moſt generous Medicines. Could any Phyſician cure the Diſeaſes of all Sexes, Times, and Ages, he would then have the Power of Creation, which would be a Character too arrogant to contend for, and little leſs than bordering upon Blaſphemy.

IT is enough, methinks, that, going upon juſt and right Principles, we are capable of curing all curable Diſeaſes, that are ſo according to the Laws of Nature. When, therefore, a Phthiſis is ſo ſtrongly rivetted upon the Habit, that no Intending or Remitting of the Laws of the Conſtitution will oblige it to diſlodge, this is a certain Indication, that, by the Laws of Nature, it is incurable.

ALL incurable Conſumptions have incurable Symptoms, that indicate their Incurableneſs;

curableneſs; and an Ulcer of the Lungs, complicated with hard, indurated, ſchirrous Swellings, or Tumours of the Liver, Spleen, *&c.* indicates that Period of Time, beyond which, in Phthiſical Conſumptions, there is no Redemption; for, in order to remedy the Obſtructions, we ſhall be oblig'd to encreaſe the Weight and Momentum of the Blood; which are Enemies to the Ulcer, and will exaſperate the Cough, Fever, and other Symptoms: So that when the Caſe happens to be thus complicated, it will be propereſt, that the Phyſician only attempt to palliate the Symptoms, and give the Patient what Reſpite he can from his Dolours.

IN this Caſe, ſuch Medicines ſhould be frequently adminiſter'd as may excite a cordial Warmth, keep up the Vigour of the Solids, and appeaſe the Cough; on which Account, great Care ſhould be taken, that no great Quantities of Opiates be given, for they will certainly lock up the Expectoration, and choke the Patient in a few Hours. If Laxatives be neceſſary to eaſe the Tenſion of the Solids in the lower Bowels,

Bowels, they muſt be us'd with all the Gentleneſs imaginable. On this Occaſion, I would recommend Clyſters of Milk and Sugar, with a little Oil. This is moſt proper to relax the Inteſtines, and give Eaſe in Gripings of the Bowels; or if a Looſeneſs be fear'd, let Half an Ounce of Diaſcordium, diſſolv'd in Half a Pint of Woman's Milk, be for the Clyſter, omitting the Oil; and as the Cough is always very troubleſome, I would adviſe the following.

℞ *Ol. Amigd. Dulc. Syr. è Mecon. ana* ℥ij. *Croc. Pulv.* ʒj. *Sach. Albiſs.* ʒij. *m. f. Lynctus, Capt. Coch.* j. *tertia, quarta, vel ſexta quaque Hora ſuperbib. Coch. quatuor Julepi ſeq.*

℞ *Aq. Lact. Aq. Cin. Hord. ana* ℥iv. *Spt. Cherm.* ℥ij. *Syr. Garioph.* ℥j. *Spt. Nitr. Dulc.* ʒj. *m. f. Julep. Capt. Coch. 4tr. omni Doſi Linct. & in Languoribus.*

℞ *Aq. Ceras. Nig.* ℥jß. *Spt. Cherm.* ℥ß. *Laud. Liquid. gtt.* xx *ad* xxv. *vel gtt.* xxx. *Syr. Crocin.* ʒvj. *Spt. Nitr. Dulc. gtt.* xx. *m. f. Hauſt. Singul. Noct. Sumend.*

THESE

THESE are Medicines, that will ſoften the Solids, relieve the Pains, and render Nature more vegete in all her Actions.

THE following is a moſt ſovereign Cordial, and fitly given to revive the ſinking Spirits, when Nature verges towards her Period.

℞ *Vitel. Ovi No.* j. *Vin. Canar.* ℥iv. *Syr. Crocin.* ℥j. *Spt. Cherm.* ℥j. *Ol. Cin. gtt.* vj. *Sachar.* ℥j. *m. f. Julep. Capt. Coch.* ii. *in Agoniis.*

LASTLY, when the Night-Sweats, Looſeneſs, and Expectoration all begin to lag, it is Time that the Phyſician take his Leave, and prognoſticate his final Diſſolution; ſince, under theſe Circumſtances, a little Time will relieve him of all his Miſeries.

TO conclude; As the Sores, Iſſues, Fiſtula's, and Ulcers, that often affect the Legs of very old People, ceaſe their Running from a Defect in the Solids, or their

Incapacity any longer to help forward the Secretion of Matter for the ſupplying of the Running; ſo the beſt Way to oblige the Solids to renew that Diſcharge, will be to adminiſter the moſt generous cordial Medicines, and ſuch as may invigorate the Heart's Motion, and, conſequently, the Motion of the Arteries in the extremeſt Parts, or near the Seat of the Ulcer, Iſſue, *&c.* But as there muſt be a Period to every Man's Life, ſo the natural drying up of theſe Runnings is a Prognoſtick certain enough that his Continuance cannot be long, and that his Glaſs has almoſt finiſh'd its Running.

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MVSEVM BRITAN NICVM